

MRD410B/F7

Home Theater System



EN

FR

ES

INTRODUCTION

CONNECTIONS

PLAYBACK

FUNCTION SETUP

OTHERS

INTRODUCTION

Safety Instructions

The model and serial numbers of this unit may be found on the cabinet.
You should record and retain those numbers for future reference.

Model No.: _____

Serial No.: _____

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The important note is located on the rear or bottom of the cabinet.



The symbol for CLASS II (Double Insulation)

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

RADIO-TV INTERFERENCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

Disconnect the mains plug to shut off when find trouble or not in use. The mains plug shall remain readily operable.

INTRODUCTION

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
WARNING: Batteries (Battery pack or battery installed) shall not be exposed to excessive heat such as sunshine, fire, or the like.

LASER SAFETY

This apparatus employs a laser. Only a qualified service person should remove the cover or attempt to service this apparatus, due to possible eye injury.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION: Laser radiation when open. Do not stare into beam.

LOCATION: Inside, near the BD mechanism.

IMPORTANT COPYRIGHT INFORMATION

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited.

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

Do not place the unit on the furniture that is capable of being tilted by a child and an adult leaning, pulling, standing or climbing on it. A falling unit can cause serious injury or even death.

This apparatus should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. Make sure to leave a space of 7.8 inches (20cm) or more around this apparatus.

To Avoid the Hazards of Electrical Shock and Fire

- Do not handle the AC power cord with wet hands.
- Do not pull on the AC power cord when disconnecting it from an AC outlet. Grasp it by the plug.
- Do not put your fingers or objects into the unit.

Location and Handling

- Do not install the unit in direct sunlight, near strong magnetic fields, or in a place subject to dust or strong vibration.
- Avoid a place with drastic temperature changes.
- Install the unit in a horizontal and stable position. Do not place anything directly on top or bottom of the unit. Depending on your external devices, noise or disturbance of the picture and/or sound may be generated if the unit is placed too close to them. In this case, please ensure enough space between the external devices and the unit.
- Depending on the environment, the temperature of this unit may increase slightly. This is not a malfunction.
- Be sure to remove the disc and unplug the AC power cord from the outlet before carrying the unit.

Dew Condensation Warning

- Dew condensation may form inside the unit in the following conditions. If so, do not use this unit at least for a few hours until its inside gets dry.
 - The unit is moved from a cold place to a warm place.
 - Under conditions of high humidity.
 - After heating a cold room.

Note about Recycling

- This unit's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with your local recycling regulations.
- Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.



Notice for Progressive Scan Output

- Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. In case of picture problems with 480 progressive scan output, it is recommended that the user switch the connection to the 'standard definition' output. If there are questions regarding your TV set compatibility with this 480p BD/DVD player, please contact our customer service center.



ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

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FUNCTION SETUP

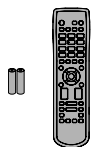
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INTRODUCTION

Supplied Accessories



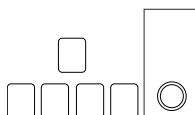
Remote Control × 1
(NC000UD)
Batteries (AA, 1.5V × 2)



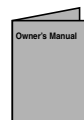
Video cable
(WPZ1520TM002/
WPZ152SCP003)



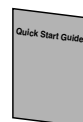
FM wire
antenna
(WX1E9000-081)



1 center, 2 front,
2 rear speakers and
1 subwoofer



Owner's Manual
(1VMN29273)



Quick Start Guide
(1VMN29274)

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Features

Blu-ray Disc

You can enjoy Blu-ray Disc which is capable of storing five times more data than a conventional DVD.

BD-Java

With some BDs which support Java applications, you can enjoy the interactive functions such as games or interactive menus.

Full high-definition video playback

Watch movies in the highest picture quality available for your HDTV. This unit offers full high-definition video playback up to 1080p resolution with multi-channel surround sound capabilities for an amazing viewing experience. A highly detailed picture and increased sharpness delivers a more true-to-life picture.

DVD upscaling for enhanced picture quality

Your current DVD will look even better than before thanks to video upscaling. Upscaling will increase the resolution of standard definition DVD to high definition up to 1080p over an HDMI connection. The picture will be less jagged and more realistic for a near high definition experience.

Enjoy your content on different kinds of media

Full backwards compatibility with DVD, CD and SD card ensures that you can continue to enjoy your current audio-video collection. Additionally, you can view JPEG digital pictures or listen to MP3 or Windows Media™ Audio music files.

Listen to rich multi-channel surround sound

Multi-channel surround sound, which recognizes real-to-life sound and makes you feel like you are really there.

PIP (BONUSVIEW)

Some BD-videos have the PIP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing **[MODE]** whenever the scene contains the secondary video.

Pop-up menu

Some BD-video have pop-up menu which is a navigation menu that can be called up and be operated on the TV screen without interrupting playback. You can call up the pop-up menu by pressing **[POP MENU / MENU]**. Contents in the pop-up menu vary depending on the disc.

Playing back contents from an SD Memory Card

You can play back MP3 / WMA / JPEGs stored in an SD Memory Card.

You can store picture-in-picture commentary, subtitles or other extras for BD-ROM Profile 1 ver.1.1 files in an SD Memory Card and play back with the BD-video.

Easy and Simple Connection to Your HDTV Via HDMI

Connect this unit to your HDTV with one single HDMI (High-Definition Multimedia Interface) cable. It is recommended to use a High Speed HDMI Cable for better compatibility. The high definition video output signal will be transferred to your HDTV without conversion to analog signals, so you will get excellent picture and sound quality, completely free from noise.

Thanks to other multiple outputs, you can also easily connect to your home theater system or amplifier.

HDMI Deep Color

Deep Color reduces posterization effect of the playback image. Refer to "HDMI Deep Color" in "FUNCTION SETUP" on page 37.

fun-Link(HDMI CEC)

This unit supports fun-Link(HDMI CEC), which allows integrated system control over HDMI and is part of the HDMI standard.

This function may not work properly on some devices.

HDMI 1080p24 output (BD only)







This unit is equipped with a feature which can provide smooth movement during playback of film originated material with the frame rate of 24 frames per second with progressive scan. (Available only when the TV is connected by an HDMI cable and compatible with 1080p24 frame input.) Refer to "HDMI Video Resolution" in "FUNCTION SETUP" on page 37.

Copyright protection system

To play back the digital video images of a BD / DVD via an HDMI connection, it is necessary that both the unit and the TV (or an AV amplifier) support a copyright protection system called HDCP (high-bandwidth digital content protection system). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV device. This unit supports HDCP. Please read the operating instructions of your TV (or AV amplifier) for more information.

Symbols Used in this Manual

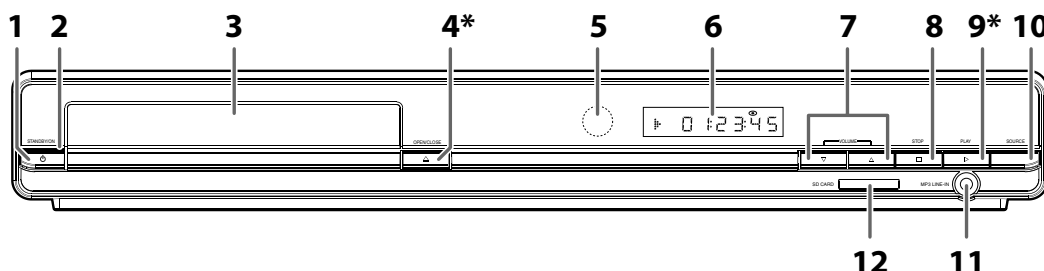
To specify which media type each function is applicable to, we put the following symbols at the beginning of each item to operate.

Symbol	Description
	Description refers to BD-video and BD-RE (ver.2.1) / BD-R (ver.1.1/1.2/1.3) recorded in BDMV format
	Description refers to DVD-video
	Description refers to audio CD / DTS-CD
	Description refers to BD-RE/-R, DVD-RW/-R, CD-RW/-R and SD Memory Card with MP3 files
	Description refers to BD-RE/-R, DVD-RW/-R, CD-RW/-R and SD Memory Card with Windows Media™ Audio files
	Description refers to BD-RE/-R, DVD-RW/-R, CD-RW/-R and SD Memory Card with JPEG files

If you do not find any of the symbols listed above under the function heading, the operation is applicable to all media.

INTRODUCTION

Front Panel



(*) The unit can also be turned on by pressing these buttons.

1. STANDBY/ON button

- Press to turn on the unit, or to turn the unit into the standby mode. (To completely turn off the unit, you must unplug the AC power cord.)
- Press and hold for 10 seconds to shut down the unit.
- This button lights up in red when the unit is in standby mode and turns off when the power is on.

2. STANDBY/ON indicator

- This indicator lights up in red when the power is in the standby mode.

3. Disc tray

- Place a disc after opening the disc tray.

4. OPEN/CLOSE button*

- Press to open or close the disc tray.

5. Infrared sensor window

- Receive signals from your remote control so that you can control the unit from a distance.

6. Display

- Refer to "Front Panel Display" on page 10.

7. VOLUME / button

- Press to adjust the volume.

8. STOP button

- Press to stop playback.

9. PLAY button*

- Press to start or resume playback.

10. SOURCE button

- Press to switch the active source mode.

11. MP3 LINE-IN jack

- Use to connect your portable audio player with 3.5mm stereo audio cable.

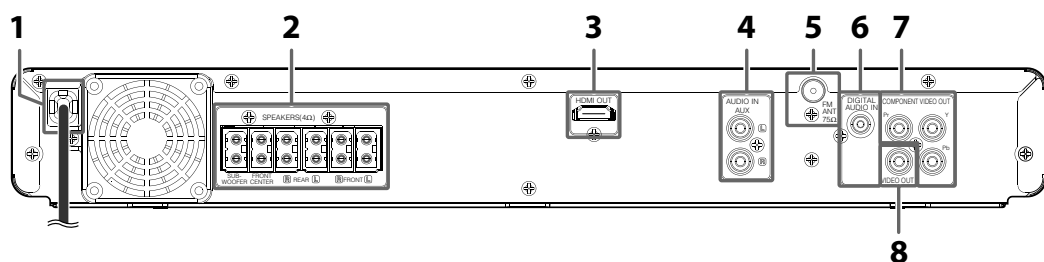
12. SD CARD slot

- Insert an SD Memory Card and play back the contents in it.

Note

- This unit will be turned into the standby mode automatically after 25 minutes of no action.

Rear Panel



1. AC power cord

- Connect to a standard AC outlet to supply power to this unit.
- Unplug this cord from the AC outlet to completely turn off the unit.

2. 5.1ch Audio Out jacks (SPEAKERS (4Ω))

- Use to connect supplied 5.1ch speakers.

3. HDMI OUT jack

- Use to connect to a display with an HDMI compatible port with an HDMI cable.

4. AUDIO IN (AUX) jacks

- Use to connect an other device with audio out jack with an audio cable.

5. FM ANT 75Ω jack

- Use to connect the supplied FM wire antenna.

6. DIGITAL AUDIO IN (Coaxial) jack

- Use to connect an other device with a digital audio coaxial output jack with a digital audio coaxial cable.

7. COMPONENT VIDEO OUT jacks

- Use to connect a TV monitor with component video inputs with a component video cable.

8. VIDEO OUT jack

- Use to connect a TV monitor, an AV receiver / amplifier or other device with a video cable.

Note

- Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.
- This unit does not have the RF modulator.

EN

INTRODUCTION

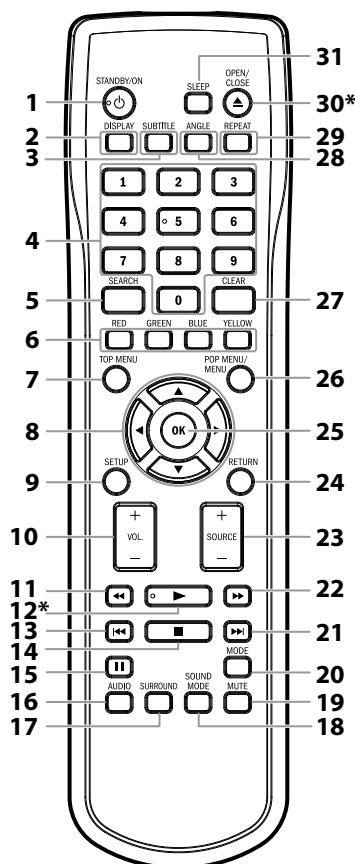
CONNECTIONS

PLAYBACK

FUNCTION SETUP

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Remote Control



(*) The unit can also be turned on by pressing these buttons.

1. **STANDBY/ON** button

- Press to turn on the unit, or to turn the unit into the standby mode. (To completely turn off the unit, you must unplug the AC power cord.)

2. **DISPLAY** button

- Press to display the on-screen display menu.

3. **SUBTITLE** button

- Press to display the subtitle menu.

4. **Number** buttons

- Press to enter the title, chapter, track or file number.
- Press to enter values in the input field.

5. **SEARCH** button

- Press to display the search menu.

6. **RED / GREEN / BLUE / YELLOW** button

- Press to select items on some BD menus.
- When file list / thumbnail list is shown, press to switch between pages.

7. **TOP MENU** button

BD:

- Press to display the top menu.

DVD:

- Press to display the title menu.

8. **▲ / ▼ / ◀ / ▶** buttons

DISC:

- Press to select items or settings.

RADIO:

- Press up or down to tune the radio frequency.
- Press left or right to start auto search.

9. **SETUP** buttons

- Press to display the setup menu.

10. **VOL. + / -** button

- Press to adjust the volume.

11. **◀◀ (reverse)** button

- During playback, press to fast reverse the playback.

12. **▶▶ (play)** button*

- Press to start playback or resume playback.

13. **◀◀ (skip)** button

- During playback, press once to return to the beginning of the current title, chapter or track.
- During playback, press twice to return to the previous title, chapter or track.
- During the JPEG playback, press to return to the previous file.

14. **■ (stop)** button

- Press to stop playback.

15. **|| (pause)** button

- Press to pause playback.
- When playback is in pause mode, press repeatedly to forward the playback step by step.

16. **AUDIO** button

DISC:

- Press to select the audio channel (such as audio languages).

RADIO:

- Press to switch between stereo and mono mode.

17. **SURROUND** button

- Press to select surround mode.

18. **SOUND MODE** button

- Press to select a sound effect mode.

19. **MUTE** button

- Press to mute the volume.

20. **MODE** button

- During BD or DVD playback, press to display the setting for the picture adjustment.
- During BD playback, press to turn the picture-in-picture feature on or off (only applicable to BD-video which supports the PIP function).
- During the JPEG playback, press to display menus for changing the visual effect for switching the image or changing the size of the image.
- In stop mode with BD inserted, press to display a menu for setting the BD audio mode.
- In stop mode with audio CD or MP3 / WMA / JPEG files inserted, press to display menus for program and random playback.

21. **▶▶ (skip)** button

- During playback, press to skip to the next title, chapter, track or file.

22. **▶▶ (forward)** button

- During playback, press to fast forward the playback.
- In pause mode, press to slow forward the playback.

23. **SOURCE + / -** button

- Press to switch the active source mode; "Disc / SD", "Aux", "Coaxial", "MP3 Line-in" or "FM".

24. RETURN button

- Press to return to the previously displayed menu screen.

25. OK button

- Press to confirm or select menu items.

26. POP MENU / MENU button

BD:

- Press to display the pop-up menu.

DVD:

- Press to display the disc menu.

27. CLEAR button

DISC:

- Press to clear the information once entered or to cancel the programming for audio CD, etc.

RADIO:

- Press to erase the selected preset station.

28. ANGLE button

- Press to access various camera angles on the disc.
- Press to rotate the JPEG files clockwise by 90 degrees.

29. REPEAT button

- Press to toggle between various repeat modes.

30. OPEN/CLOSE button*

- Press to open or close the disc tray.

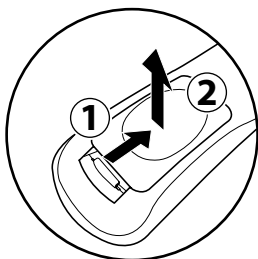
31. SLEEP button

- Press to set the sleep timer.

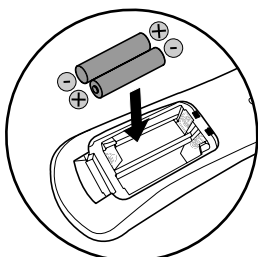
Installing the Batteries in the Remote Control

Install AA (1.5V) battery × 2 matching the polarity indicated inside battery compartment of the remote control.

1 Open the cover.

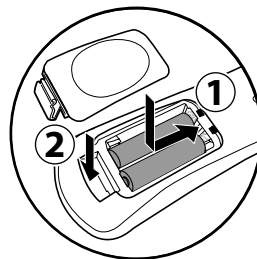


2 Insert batteries.



Make sure to match + and - on the batteries to the marks indicated in the battery compartment.

3 Close the cover.



Note

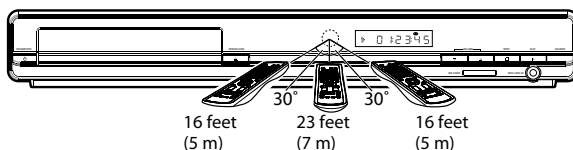
Incorrect use of batteries can result in hazards such as leakage and bursting. Please observe the following:

- Do not mix alkaline, standard (carbon-zinc), or rechargeable (ni-cad, ni-mh, etc) batteries.
- Do not mix new and old batteries together.
- Do not use different kinds of batteries together. Although they may look similar, different batteries may have different voltages.
- Make sure that the + and - ends of each battery match the indications in the battery compartment.
- Remove batteries from battery compartment that are not going to be used for a month or more.
- When disposing of used batteries, please comply with governmental regulations or environmental public rules that apply in your country or area. (Refer to page 3.)
- Do not recharge, short-circuit, heat, burn or disassemble batteries.

Using a Remote Control

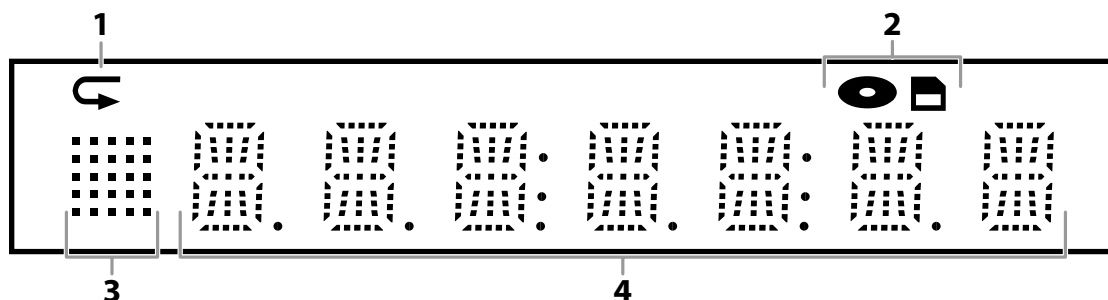
Remote Control Usage Guidelines:

- Make sure that there are no obstacles between the remote control and the infrared sensor window on the unit.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the infrared sensor window of the unit.
- Remote control for different devices can interfere with each other. Avoid using remote control for other device located close to the unit.
- Replace the batteries when you notice a fall off in the operating range of the remote control.
- The maximum operable ranges from the unit are as follows.
 - **Line of sight:** approx. 23 feet (7 m)
 - **Either side of the center:** approx. 16 feet (5 m) within 30°
 - **Above:** approx. 16 feet (5 m) within 15°
 - **Below:** approx. 10 feet (3 m) within 30°



INTRODUCTION

Front Panel Display



* Brightness of the display can be adjusted. Refer to "Panel Display" in "List of Setup Menus" on page 40.

1. Displays repeat icon. (Appears during repeat playback.)
2. Displays media mode icon (disc mode or SD card mode).
3. Displays playback status icon. Refer to table A below.
4. Displays source mode status (refer to table B below) or information such as title number, elapsed playing time, repeat type, menu type, etc.

<Table A>

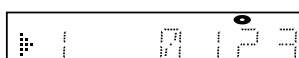
Playback status icon	Mode
	Playback is in progress
	Stop mode
	Pause mode
	Fast forward mode Tuning radio station (in FM mode)
	Fast reverse mode Tuning radio station (in FM mode)
	Slow forward mode

<Table B>

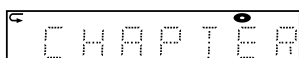
- When switching the source mode, the following will be displayed.

Display	Mode
LOADING	"Disc / SD" mode
AUX	"Aux" mode
COAX IN	"Coaxial" mode
MP3 LINE	"MP3 Line-in" mode
FM 105.0	"FM" mode (Frequency of radio station will be displayed.)

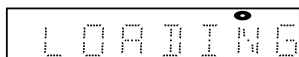
e.g.)



Disc is being played back.
Indicating the current title number and the elapsed time.



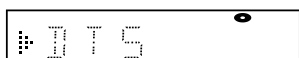
Current chapter is in chapter repeat mode during playback of disc.



Loading a disc and the unit is in Disc / SD card mode.



Dolby Digital audio is being played back during playback of disc.

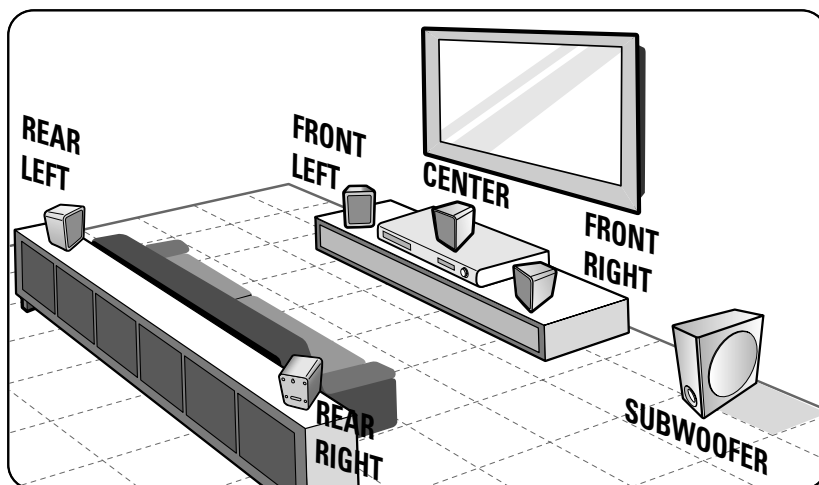


DTS audio is being played back during playback of disc.

CONNECTIONS

Placing the Speakers

Make the following connection to ensure an optimum sound experience.



- 1 Place the front left and right speakers at equal distances from the TV and at an angle of approximately 45 degrees from the listening position.
- 2 Place the center speaker above the TV or the main unit so that the center channel's sound is localized.
- 3 Place the rear speakers at normal listening ear level facing each other.
- 4 Place the subwoofer at the corner of the room. Otherwise, keep it at least one meter away from the TV.

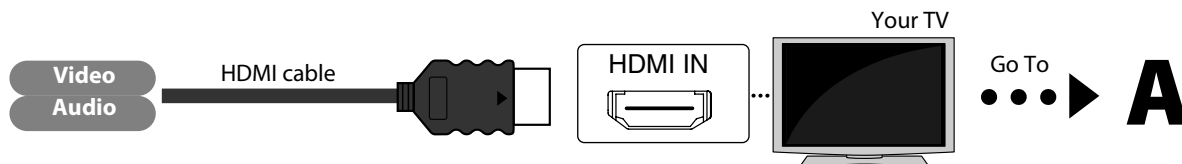
Note

- The placement diagram shown here is only a guideline that provides great system performance. You may find other placement choices that are more suitable for your room layout that provide the sound experience you enjoy.
- To avoid magnetic interference, never position the front speakers too close to your TV.
- The rear speakers are labeled as REAR LEFT or REAR RIGHT.
- The front speakers are labeled as FRONT LEFT or FRONT RIGHT.
- For speaker setup, refer to "Speaker Setup" on pages 39-40.

Connection to the TV

- 1 Choose the appropriate connection, then proceed to the corresponding instruction (A, B or C) on the pages 12-13.

Best (Supports up to 1080i, 1080p, 1080p/24 resolution.)



No supplied cables are used in this connection:

Please purchase the necessary cables at your local store.

Use an HDMI cable with the HDMI logo (a certified HDMI cable) for this connection.

High Speed HDMI cable (also known as HDMI category 2 cable) is recommended for better compatibility.

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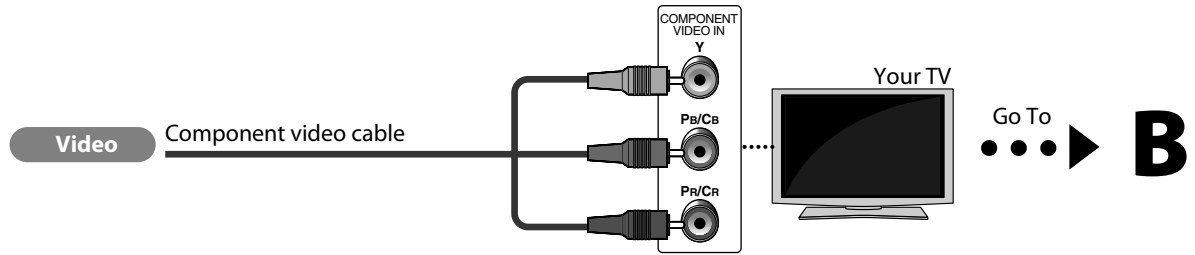
PLAYBACK

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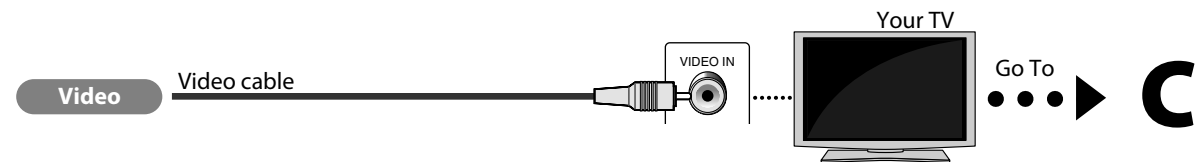
CONNECTIONS

Better (Supports up to 1080i resolution.)



No supplied cables are used in this connection:
Please purchase the necessary cables at your local store.

Basic (Supports only 480i resolution.)



- Connect this unit directly to the TV. If the video cables are connected to a VCR, pictures may be distorted due to the copy right protection system.

Supplied cables used in this connection are as follows:

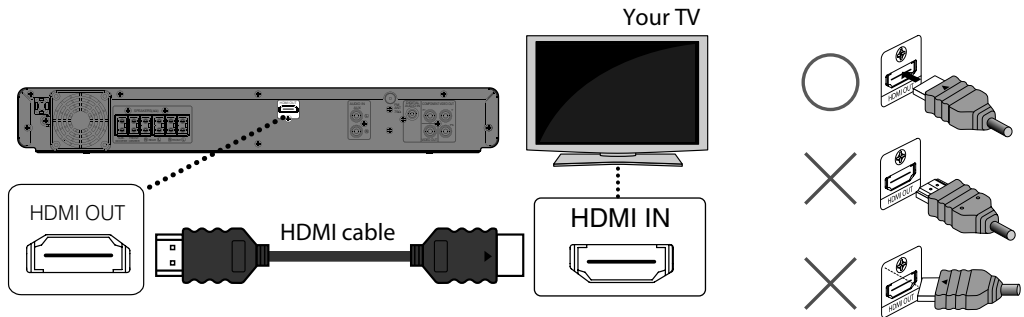
- Video cable x 1

2

Connect the cables by following the descriptions below.

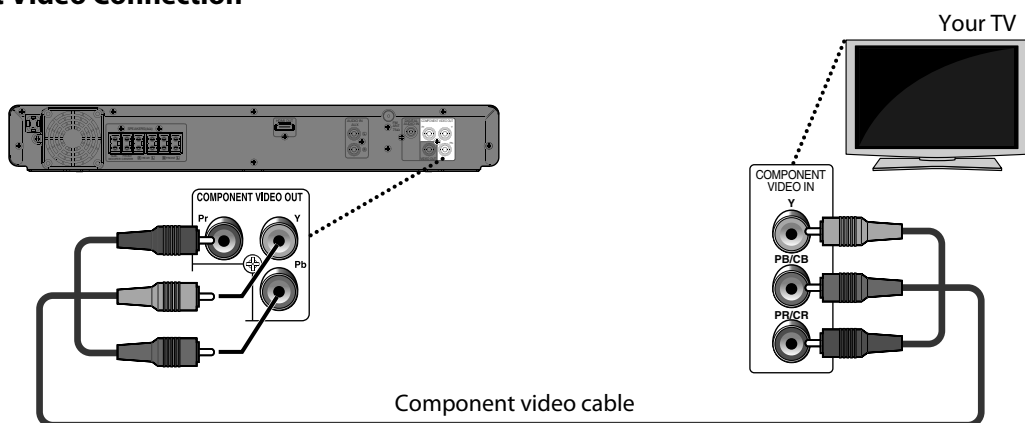
HDMI Connection

A



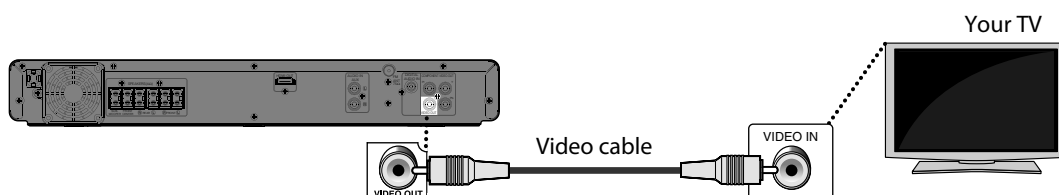
Component Video Connection

B



Standard Video Connection

C



HDMI Mode and Actual Output Signals

You can change the resolution of the video signal being output from the HDMI OUT jack in the setup menu. For details, refer to "HDMI Video Resolution" on page 37.

Copyright protection system

To play back the digital video images of a BD-video or DVD-video via an HDMI connection, it is necessary that both the player and the display device (or an AV receiver / amplifier) support a copyright protection system called HDCP (high-bandwidth digital content protection system). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV device. This unit supports HDCP. Please read the operating instructions of your display device (or AV receiver / amplifier) for more information.

Note

- When connected to an HDCP incompatible display device, the picture will not be displayed properly.
- To output the audio signals from the HDMI OUT jack, set "Audio Output" to "HDMI Normal" or "HDMI LPCM" in the setup menu. (refer to page 42.)
- The audio signals from the HDMI OUT jack (including the sampling frequency, the number of channels and bit length) may be limited by the device that is connected.
- Among the display device(s) that support HDMI, some do not support audio output (for example, projectors). While connected to a device such as a projector, audio will not be output from the HDMI OUT jack.
- When this unit's HDMI OUT jack is connected to a DVI-D compatible display device(s) (HDCP compatible) with an HDMI-DVI converter cable, the signals are output in digital RGB.

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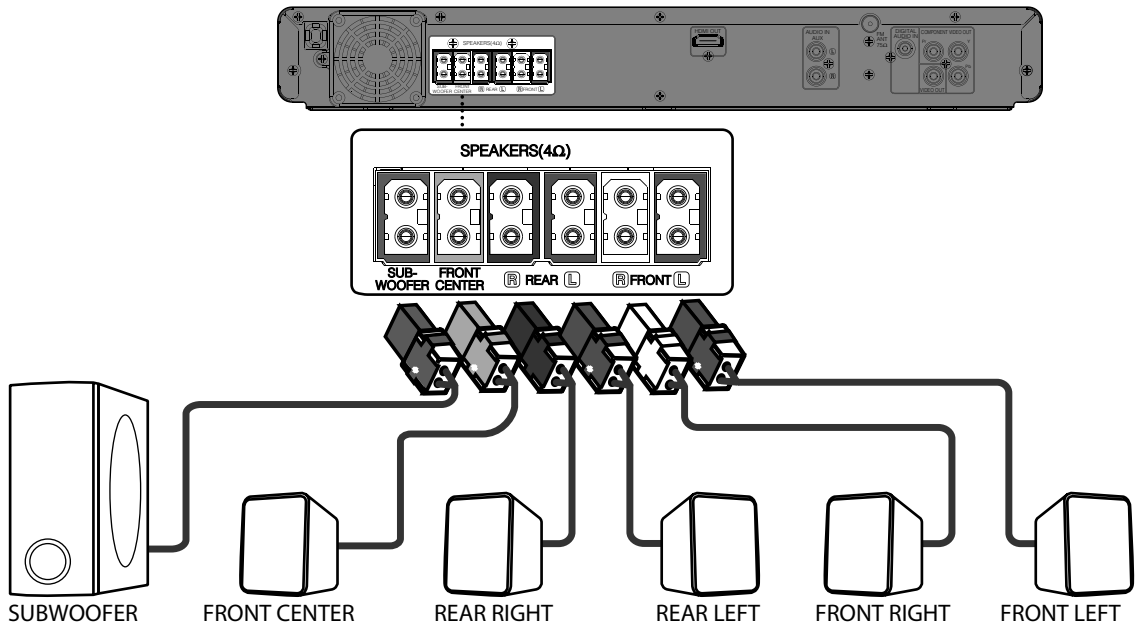
PLAYBACK

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Connecting Speakers and Subwoofer



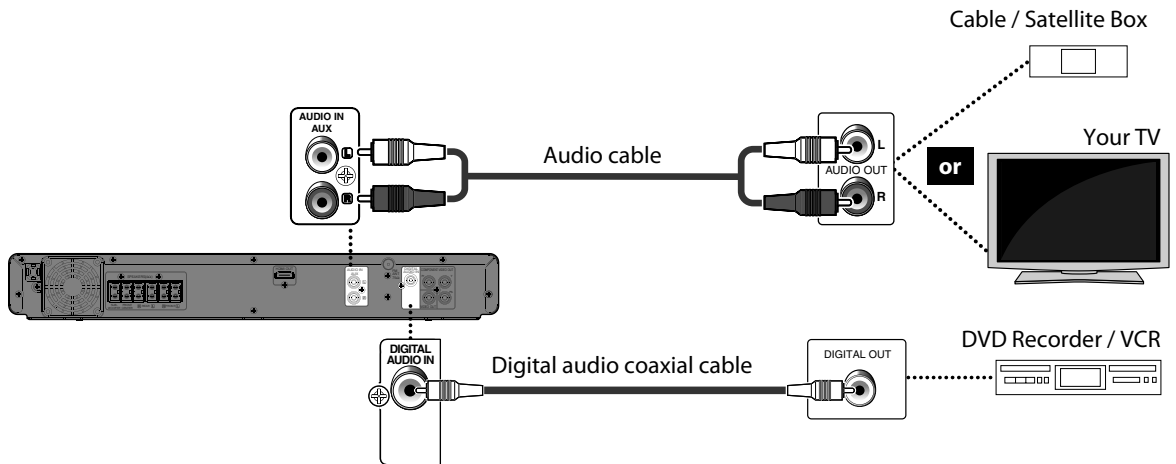
- 1 Connect the speaker cables to the matching color sockets on the speakers.
- 2 Connect all the speakers and subwoofer to the matching sockets at the rear of the main unit.
Make sure that the colors of the cables and sockets are matched.

Note

- To prevent unwanted noise, never place the speakers too close to the main unit, subwoofer, AC power adapter, TV or any other radiation sources.

Connecting Audio from Cable Box/Recorder/Game Console or TV

- This unit provides analog and digital audio connection. You can connect the audio output from an audio / video device (e.g. DVD Recorder, VCR, Cable / Satellite Box, game console or TV) to this Blu-ray Disc Home Theater in order to enjoy the multi-channel surround sound capabilities.



- Use an audio cable (not supplied) to connect the AUDIO IN (AUX) jacks on the main unit to the AUDIO OUT jacks on the connected device.
- Use a digital audio coaxial cable (not supplied) to connect the DIGITAL AUDIO IN (Coaxial) jack on the main unit to the DIGITAL OUT (Coaxial) jack on the connected device.

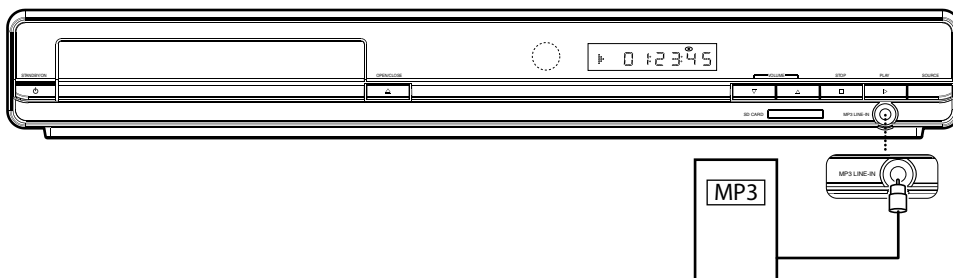
No supplied cables are used in this connection:
Please purchase the necessary cables at your local store.

Note

- To listen to the audio output from these connections, select "Speakers" in "Audio Output" (refer to page 42) and change the active source mode to the connected input. (Refer to "Switching Active Source Mode" on page 34.)

CONNECTIONS

Connecting Portable Media Player



Connect a 3.5mm stereo audio cable(not supplied) to the MP3 LINE-IN jack on this unit and the headphone jack on your portable media player.

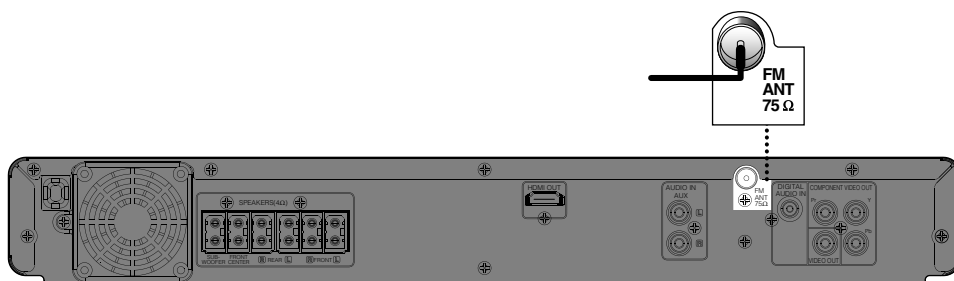
No supplied cables are used in this connection:

Please purchase the necessary cables at your local store.

Note

- To playback the audio from your portable media player, refer to “Play from Portable Media Player” on page 34.

Connecting FM Radio Antenna



- 1 Connect the supplied FM wire antenna to the FM ANT 75Ω jack on this unit.
- 2 Extend the FM antenna and fix its ends to the wall for optimum reception.


Note

- For better FM stereo reception, connect an external FM antenna (not supplied).
- Place the antenna away from your TV, VCR or other radiation source to prevent any unwanted interference.
- For FM radio playback, refer to “Radio Operations” on page 35.

CONNECTIONS

After you have completed all the connections, you must find the correct video channel (external input channel) on your TV.

Finding the Video Channel on Your TV

- 1** After you have made all the necessary connections, press [STANDBY/ON 



Note

- If the TV is connected by an HDMI cable, it may take a while for the opening picture to come up.

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Information on Playback

Before you start playing back a disc, read the following information.

Playable Discs and Files

This unit is compatible to play back the following discs / files. To play back a disc / file, make sure that it meets the requirements for region codes and color systems as described below. You can play back discs that have the following logos.

Other disc types are not guaranteed to play back.

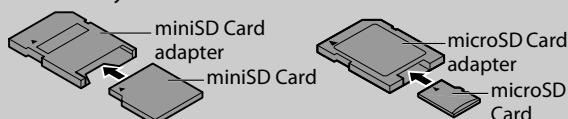
Playable discs	Logos
Blu-ray Disc - BD-video (single / dual layer) - BD-RE ver. 2.1 (single / dual layer) (Recorded in BDMV format) - BD-R ver. 1.1 / 1.2 / 1.3 (single / dual layer) (Recorded in BDMV format) (Unclosed discs may not be played back.)	
DVD-video	
DVD-RW	
DVD-R	
CD-DA (audio CD)	
CD-RW	 
CD-R	 
Kodak Picture CD	
DTS-CD	-

Playable files	Media
MP3	BD-RE/-R DVD-RW/-R CD-RW/-R
Windows Media™ Audio	SD Memory Card (including SDHC)
JPEG	miniSD Card microSD Card

Readable cards	Playable files / data
SD Memory Card (8 MB - 2 GB)	MP3, Windows Media™
SDHC Memory Card (4 GB - 8 GB)	Audio, JPEG, picture-in-picture commentary,
miniSD Card (8 MB - 2 GB)	subtitles or other extras for
microSD Card (8 MB - 2 GB)	BD-ROM Profile 1 ver.1.1

Note for SD Memory Cards

- This unit supports SD Memory Card with FAT12/ FAT16 file system, and SDHC Memory Card with FAT32 file system.
- This unit does not support NTFS file system.
- This unit may not read SD Memory Cards formatted on a computer. If that is the case, please reformat the SD Memory Cards in this unit and try again.
- This unit does not support miniSDHC and microSDHC Memory Card.
- For miniSD Card and microSD Card, an adapter is necessary.



- Portions of this product are protected under copyright law and are provided under license by ARIS / SOLANA / 4C.
- Please keep the SD Memory Cards in their cases when you are not using them.
- Do not try to open or modify the card.
- Do not touch the terminal surface with your fingers or any metals.
- Do not attach additional labels or stickers to cards.
- Do not remove the label of the SD Memory Cards.
- This unit recognizes up to 8 characters of file name in the SD Memory Card. Characters after 8th will not be displayed.

Unplayable Discs and Files

The following discs will not be played back in this unit.

- CD-ROM
- CD-I (compact disc-interactive)
- DVD-RAM
- VSD (video single disc)
- DVD-audio
- Video CD
- HD DVD
- SVCD
- Unfinalized disc
- BD-RE (ver.1.0)
- BD-RE (ver.2.1) (Recorded in BDAV format)
- BD-R (ver.1.1 / 1.2 / 1.3) (Recorded in BDAV format)
- BD / DVD / CD / SD Memory Card contains DivX® files.
- BD / DVD hybrid disc (played back as a BD-video only)
- DVD-RW/-R recorded in non compatible recording format.
- Super Audio CD - Only the sound on the CD layer can be heard. The sound on the high-density Super Audio CD layer cannot be heard.
- Playability of dual discs are not guaranteed.
- This unit cannot play back the disc contents protected by Windows Media™ Digital Rights Management (DRM).

Color Systems

BD-video and DVD-video are recorded in different color systems throughout the world. The most common color system is NTSC (which is used primarily in the United States and Canada).

This unit employs NTSC color system, so the disc you play back must be recorded in the NTSC system. You cannot play back the disc recorded in other color systems.

Region Codes

This unit has been designed to play back BD-video with region "A" and DVD-video with region "1" or "ALL". You cannot play back BD-video or DVD-video that are labeled for other regions. Look for the symbols on the right on your BD-video or DVD-video.

If these region symbols do not appear on your BD-video or DVD-video, you cannot play back the disc in this unit. The letter or number inside the globe refers to region of the world. A BD-video or DVD-video labeled for a specific region can only be played back in the unit with the same region code.

BD-video

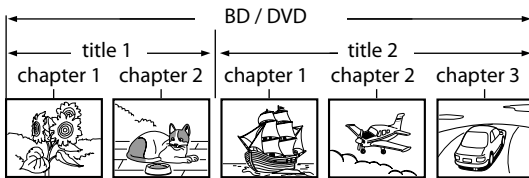


DVD-video



Structure of Disc / SD Memory Card Contents

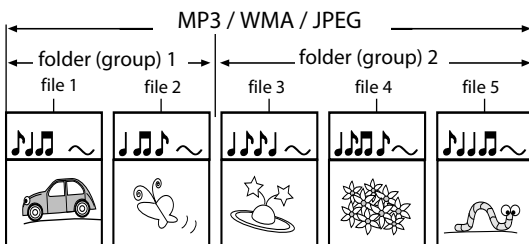
The contents of BD / DVD are generally divided into titles. Titles may be further subdivided into chapters.



audio CD are divided into tracks.



Data discs or SD Memory Cards containing MP3 / WMA / JPEG are divided into folders, and the folders are subdivided into files.



On-Screen Display

You can check information about the current disc by pressing **[DISPLAY]**.

To call the on-screen display menu, press **[DISPLAY]** during playback. Every time you press **[DISPLAY]**, the information changes. Depending on the media, available information varies.



- off → Title / Chapter information
- Title information (elapsed time)
- Title information (remaining time)
- Decoding format information → off



- off → Chapter information (elapsed time)
- Chapter information (remaining time)
- Title information (elapsed time)
- Title information (remaining time)
- Decoding format information → off



- Track information (elapsed time)
 - Track information (remaining time)
 - Disc information* (elapsed time)
 - Disc information* (remaining time)
 - Track information (elapsed time)
- (* not available during program / random playback)

MP3

- off (File information (elapsed time))
- File name information
- off (File information (elapsed time))

WMA

- off (File information (elapsed time))
- File name information
- Tag information (title name)
- Tag information (artist name)
- off (File information (elapsed time))

JPEG

- off → File information → File name information → off

Chapter information

<Title / Chapter information for BD>



<Chapter information for DVD>



- 1 Current title number
- 2 Current chapter number / Total number of chapters
- 3 Current repeat setting (Only when repeat setting is active)
(C: Chapter repeat, T: Title repeat)
- 4 Indicates that the multi camera angle images are available on the scene
- 5 Current playback status
- 6 Elapsed time (or remaining time) of the current chapter

Title information



- 1 Current title number / Total number of titles
- 2 Elapsed time (or remaining time) of the current title

Track / File information



- 1 Current track (file) number / Total number of track (file)
- 2 Elapsed time (or remaining time) of the current track / file
(except for JPEG files)
- 3 Indication of SD Memory Card playback
- 4 Current repeat setting
(Only when repeat setting is active)
(T: Track repeat, G: Group repeat, A: All repeat)

Disc information



- 1 Current track number / Total number of tracks
- 2 Elapsed time (or remaining time) of the current disc

File name information



- 1 Media icon and file name



: MP3 files



: WMA files



: JPEG file

Tag information

<Title name information>



<Artist name information>



- 1 Title name based on tag information of current Windows Media™ Audio file
- 2 Artist name based on tag information of current Windows Media™ Audio file

Decoding format information

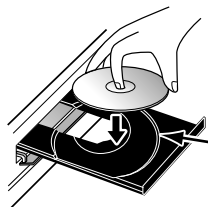


- 1 Decoding format

How to Insert a Disc

1 Press [OPEN/CLOSE ▲] to open the disc tray.

2 Place the disc on the disc tray with its label side facing up.



Align the disc to the disc tray guide.

- Make sure the disc is compatible with this unit.
(Refer to page 18 for the list of compatible discs.)

3 Press [OPEN/CLOSE ▲] to close the disc tray.

It may take a while to load the disc.

To eject the disc:

Press [OPEN/CLOSE ▲] to open the disc tray.

Remove the disc.

Press [OPEN/CLOSE ▲] to close the disc tray.

Reading the SD Memory Card

MP3

WMA

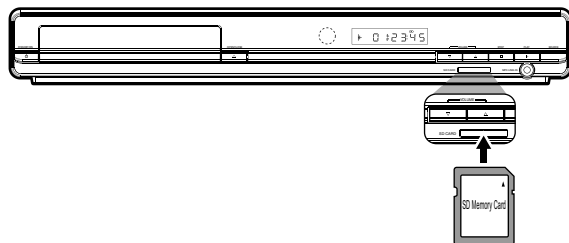
JPEG

You can play back the MP3 / WMA / JPEG files in an SD Memory Card.

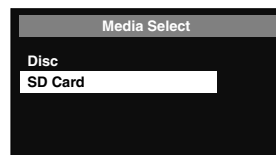
With the SD Memory Card, you can also enjoy the special additional contents for BD-ROM Profile 1 ver.1.1 which can be downloaded from the Internet. You can store the contents on an SD Memory Card via computer and play them back with the BD-video. For more information about the special additional contents, please refer to the instruction book that came with the disc.

1 Insert an SD Memory Card, with the label side facing up, into the SD CARD slot until it clicks.

If no disc is in operation, "Media Select" screen will appear on the TV screen.

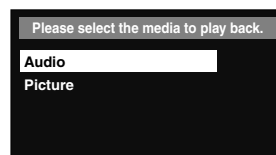


2 Use [▲ / ▼] to select "SD Card", then press [OK].



- Media filter screen will appear.
- When the SD Memory Card contains only one type of file, skip to step 4.

3 Select the type of the file you want to play back in the media filter screen. Then press [OK] to display the file list.



4 Use [▲ / ▼] to select a desired track, folder or file, then press [OK]. Use [◀ / ▶] to go back and forward between the hierarchies.

- If you press [OK] on the desired file, playback will start.

To remove the SD Memory Card:

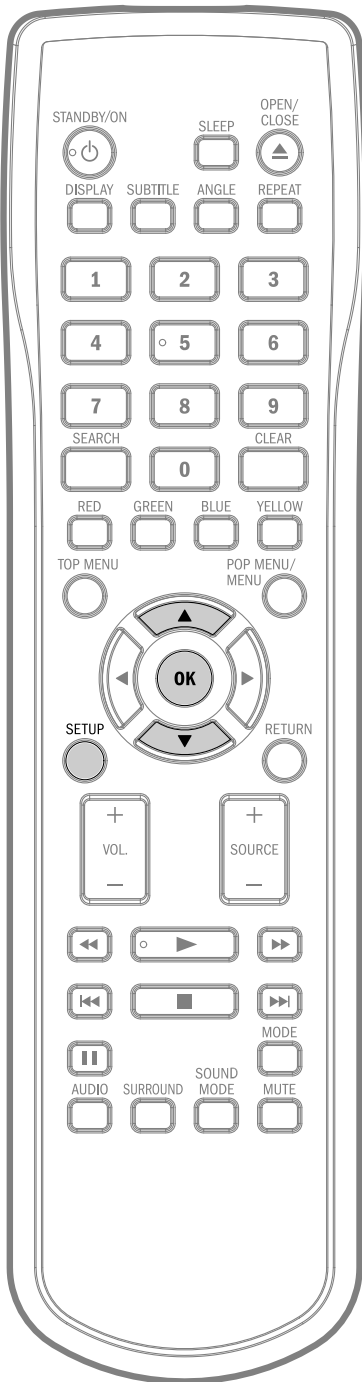
In stop mode, gently push in the SD Memory Card, then pull it out slowly.

Note

- The "Media Select" screen will disappear under the conditions listed below:
 - when the screen saver is activated.
 - when [RETURN] is pressed.
 - when the setup menu is called up.
- If the "Media Select" screen disappears before you make the selection, refer to "Selecting the Media Mode" on page 22.
- Do not remove the SD Memory Card or turn the unit to the standby mode while the contents of the card are in playback. It may result in malfunction or loss of the card's data.
- Do not delete the folders or files in the SD Memory Card with your computer. This unit may not read SD Memory Cards formatted on a computer.
- If a folder or file name includes one of the following unrecognizable characters, the folder or file name may not be displayed correctly.
 - Unrecognizable characters : . , " = + [] ; / \ : | ¥
- The system can recognize up to 999 folders / 9,999 files for SD Memory Card.
- The 10th and deeper hierarchies cannot be displayed for SD Memory Card.
- For an SD Memory Card, extensions other than listed below cannot be recognized.
 - MP3 : ".mp3"
 - WMA : ".wma"
 - JPEG : ".jpg"

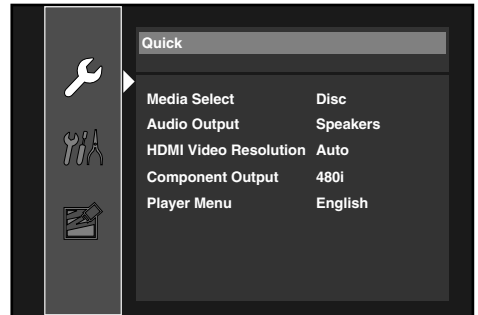
Selecting the Media Mode

For the playback media to be read by this unit, the correct media mode should be selected. You can switch the media mode by following the steps below. **“Media Select” is available only when an SD Memory Card is inserted and this unit is in Disc / SD card mode.**

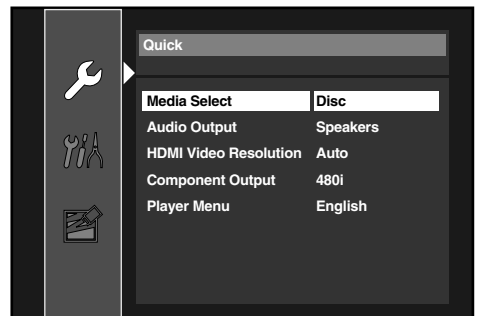


1 In stop mode, press [SETUP].

2 Use [▲ / ▼] to select , then press [OK].



3 Use [▲ / ▼] to select “Media Select”.



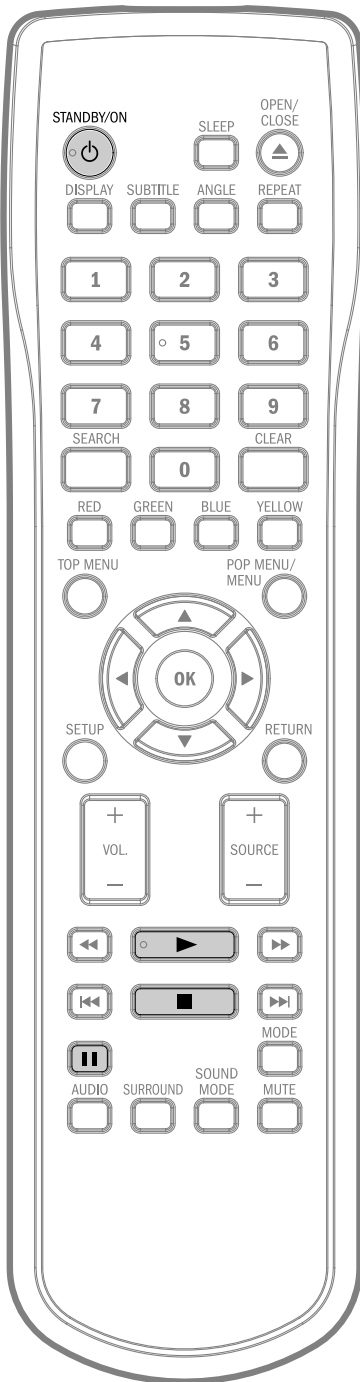
4 Press [OK] repeatedly to select the desired media.

5 Press [SETUP] to exit.
• Selected media mode is now activated.

Note

- Even if you set the media mode to “SD Card”, the setting will be switched to “Disc” in following cases :
 - If you turn the unit into the standby mode.
 - If you change the active source mode to “Aux”, “Coaxial”, “MP3 Line-in” or “FM” mode.

Playing Back a BD or a DVD



- 1** Press [STANDBY/ON].
 - 2** Turn on the TV and select the appropriate input on the TV to which the unit is connected.
 - 3** Insert a disc (refer to “How to Insert a Disc” on page 21).
 - 4** Playback may start automatically.
If not, press (play)].
Some discs may show a title or a disc menu. In such case, refer to “Using the Title / Disc / Pop-up Menu” on page 24.
- To pause playback:**
Press (pause)].
- To return to the normal playback:**
Press (play)].
- To stop playback:**
Press (stop)].
Playback will be in Resume-On-Stop mode.

Resume-On-Stop mode

If a playback is in Resume-On-Stop mode, when you press (play)] next time, the playback will start from the point where it has been stopped.

Note

- Resume playback may not be available for the BD that supports Java applications (BD-Java).
- In the “Disc” mode, the resume information will be cleared when;
 - (stop)] is pressed while in the Resume-On-Stop mode.
 - the parental level is changed.
 - the disc tray is opened.
- In the “SD Card” mode, the resume information will be cleared when;
 - (stop)] is pressed while in the Resume-On-Stop mode.
 - the SD Memory Card is removed.
 - the unit is turned into the standby mode.

Note

- may appear at the top-right on the TV screen when the operation is prohibited by the disc or this unit.
- During the playback of 2-layered disc, pictures may stop for a moment. This happens when the 1st layer switches to the 2nd layer. This is not a malfunction.
- The operation may vary when you play back BD-video and DVD-video with disc menu. Refer to the manual accompanying the disc for details.
- Set “Still Mode” setting to “Field” in “Video” menu if pictures in the pause mode are blurred. Refer to “Still Mode” on page 38.

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Using the Title / Disc / Pop-up Menu



Many of BD-video and DVD-video discs contain title menu (BD-video / DVD-video), disc menu (DVD-video) or pop-up menu (BD-video) which guides you through the available functions in the disc. The contents of the menus may differ depending on the discs.

Title menu (BD-video / DVD-video)

- 1 Press [TOP MENU].
- 2 Use [▲ / ▼ / ◀ / ▶] to select an item, then press [OK].
- 3 Press [TOP MENU] to exit.

Disc menu (DVD-video)

- 1 Press [POP MENU / MENU].
- 2 Use [▲ / ▼ / ◀ / ▶] to select an item, then press [OK].
- 3 Press [POP MENU / MENU] to exit.

Pop-up menu (BD-video)

This is a special feature available for some BD-videos. When you press [POP MENU / MENU], a menu pops out on the TV screen during play back.

- 1 During the playback of BD-video, press [POP MENU / MENU].
- 2 Use [▲ / ▼ / ◀ / ▶] to select an item, then press [OK].
- 3 Press [POP MENU / MENU] to exit.

Note

- Contents of menus and corresponding menu operations may vary among discs. Refer to the manual accompanying the disc for details.

Playing Back an Audio CD or a Disc with MP3 / Windows Media™ Audio / JPEG Files



CD

MP3

WMA

JPEG

Before you begin, make sure the correct media mode is selected. Refer to “Selecting the Media Mode” on page 22.

1

Insert an audio CD or a disc with MP3, WMA or JPEG files.

- Media filter screen will appear.
- For audio CD and a disc contains only one type of file, skip to step 3.

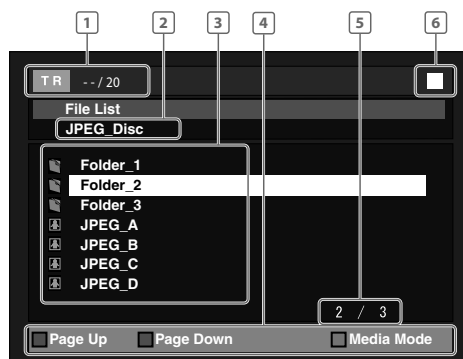
2

Select the type of the file you want to play back in the media filter screen. Then press [OK] to display the file list.

3

Use [▲ / ▼] to select a desired track, folder or file, then press [OK]. Use [◀ / ▶] to go back and forward between the hierarchies (only for MP3 / WMA / JPEG files).

- If you press [OK] on the desired file, playback will start.



e.g.) JPEG

- 1 audio CD : Track information
MP3 / WMA / : File information
JPEG
- 2 audio CD : “CD-DA” will be displayed.
MP3 / WMA / : Current Disc or folder name will be displayed.
JPEG
- 3 audio CD : List of the track number and time.
MP3 / WMA / : List of the file / folder names in the current folder / disc
JPEG
- 4 Operation : Press [RED] to go to the previous page.
guide Press [GREEN] to go to the next page.
Press [YELLOW] to select “Media Mode”
- 5 Current page / Total page number
- 6 Playback status

Icons:



: Folder



: audio CD tracks



: MP3 files



: WMA files



: JPEG files

4

Press [■ (stop)] to stop playback.

It is recommended that files to be played back in this unit are recorded under the following specifications:

<MP3/Windows Media™ Audio>

- Sampling frequency : 32 kHz, 44.1 kHz or 48 kHz
- Constant bit rate : 112 kbps - 320 kbps (MP3), 48 kbps - 192 kbps (Windows Media™ Audio)

<JPEG>

- Upper limit : 2,560 x 1,900 dots (sub sampling is 4:4:4)
5,120 x 3,840 dots (sub sampling is up to 4:2:2)
- Lower limit : 32 x 32 dots
- File size of image : 12 MB maximum

Note

- Unrecognizable characters will be replaced with asterisks.
- Some unplayable folders or files may be listed due to the recording status.
- High-resolution JPEG files take longer to be displayed.
- Progressive JPEG files (JPEG files saved in progressive format) cannot be played back in this unit.
- The system can recognize up to 255 folders / 999 files for CD, 999 folders / 9,999 files for BD and DVD.
- The 9th and deeper hierarchies cannot be displayed for CD. The 10th and deeper hierarchies cannot be displayed for BD and DVD.
- For the SD Memory Card playback, refer to "Reading the SD Memory Card" on page 21.
- Extensions other than listed below cannot be recognized.
 - MP3 : ".mp3"
 - WMA : ".wma"
 - JPEG : ".jpg" / ".jpeg"
- With regard to the multi-border BD-RE/-R, additionally recorded sections cannot be recognized.
- With regard to the multi-border DVD-RW/-R, additionally recorded sections may not be recognized.

Kodak Picture CD

JPEG

This unit can also run JPEG files stored on Kodak Picture CD. You can enjoy picture images on the TV set by playing back the Kodak Picture CD. This unit conforms to ver.7.0 of Kodak Picture CD. For details of Kodak Picture CD, contact a shop that provides developing service of Kodak Inc.

1

When Kodak Picture CD is inserted in this unit, Kodak Picture CD menu will appear automatically on the TV screen.



1 File information

2 Current page / Total page number

3 Operation guide: Press [BLUE] to go to the previous page.
Press [YELLOW] to go to the next page.

4 Playback status

2

Use [▲ / ▼ / ◀ / ▶] to select a desired file to be played back, then press [▶ (play)] or [OK].

- An image will be played back from the selected file and go to the next one in turn.

3

Press [■ (stop)] to stop playback.

To return to the first item:
Press [TOP MENU].

To return to the file played last:
Press [POP MENU / MENU].

Tips for JPEG / Kodak Picture CD Playback

- The selected file will be played back and go to the next file in the current hierarchy in turn every 10 seconds.
- Every press on [ANGLE] will turn the image clockwise by 90 degrees when an image is displayed.
- To change the visual effect for switching the playback image, press [MODE] once, then use [◀/▶] or [OK] to switch between "Cut In/Out" and "Fade In/Out".
- During JPEG / Kodak Picture CD playback, press [MODE] twice to change the size of the playback image, then use [◀/▶] or [OK] to switch between "Normal" (100 %) and "Small" (95 %). The size change may have no effect on some files (e.g. files with a small picture size).

Fast Forward / Fast Reverse



- 1 During playback, press [▶▶ (forward)] repeatedly for fast forward.
During playback, press [◀◀ (reverse)] repeatedly for fast reverse.
Every time you press [▶▶ (forward)] or [◀◀ (reverse)], the playback speed will change.
- 2 Press [▶ (play)] to return to normal playback.

Note

- For BD and DVD, speed changes in 5 different levels.
- For audio CD, MP3 and Windows Media™ Audio, speed changes in 3 different levels.
- For audio CD, fast forward / fast reverse search between different tracks are not available during program and random playback.
- For MP3 and Windows Media™ Audio, fast forward / fast reverse search between different files are not available.

Slow Forward Playback



- 1 During playback, press [|| (pause)], then press [▶▶ (forward)].
Every time you press [▶▶ (forward)], playback speed will change.
- 2 Press [▶ (play)] to return to normal playback.

Note

- Slow motion speed changes in 3 different levels.
- Only slow forward is available.
- Set "Still Mode" setting to "Field" in "Video" menu if pictures in the slow forward playback mode are blurred. Refer to "Still Mode" on page 38.

Step by Step Playback



- 1 In pause mode, press [|| (pause)] repeatedly.
Every time you press [|| (pause)], playback will advance one step at a time.
- 2 Press [▶ (play)] to return to normal playback.

Note

- Only step by step forward is available.
- Set "Still Mode" setting to "Field" in "Video" menu if pictures in step by step playback mode are blurred. Refer to "Still Mode" on page 38.

Repeat Playback

Available repeat functions vary depending the discs.

- 1 During playback, press [REPEAT] repeatedly to select the desired repeat mode.

Repeat mode	Available media
Chapter repeat The current chapter will be played back repeatedly.	
Title repeat The current title will be played back repeatedly.	
Track repeat The current track will be played back repeatedly.	
Group repeat The current folder will be played back repeatedly.	
All repeat All tracks or files in the media will be played back repeatedly.	

Note

- The repeat setting will be canceled when you stop playback.
- The chapter, title, track or group repeat will be cleared when moving to another chapter, title, track / file or folder.
- Chapter and title repeat are not available with some scenes.
- When the repeat setting is set for a MP3 or WMA folder (file), the repeat setting will be canceled if you select other MP3 or WMA folder (file) to playback.

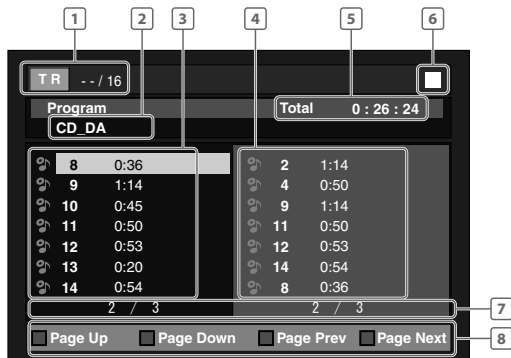
Program Playback



You can play back the disc/card in your desired order.

1 In stop mode, press [MODE].

2 Use [▲ / ▼] to select a track / folder / file, then press [OK].



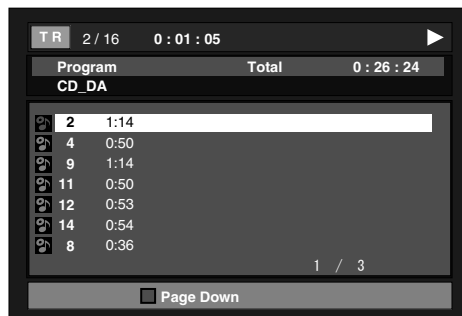
e.g.) audio CD

- 1 audio CD** : Track information
MP3 / WMA / JPEG : File information
- 2 audio CD** : "CD-DA" will be displayed.
MP3 / WMA / JPEG : Current Disc, SD Memory Card, or folder name will be displayed.
- 3 Track / Folder / File list** : Track / Folder / File list in the original order.
- 4 Programmed list** : Track / File list in the programmed order.
- 5 Cumulative playback time of all tracks in the programmed list. (audio CD only)**
- 6 Playback status**
- 7 Current page / Total page number**
- 8 Operation Guide:** Press [RED] to go to the previous page in the track / file list.
Press [GREEN] to go to the next page in the track / file list.
Press [BLUE] to go to the previous page in the programmed list.
Press [YELLOW] to go to the next page in the programmed list.

- For MP3, WMA or JPEG files, use [▲ / ▼] to select a folder, then press [OK] first, and then use [▲ / ▼] to select a file, then press [OK].
- Press [CLEAR] to erase the last file of the program.
- Use [▲ / ▼] to select "All Clear" at the bottom of the list to erase all the tracks / files in the program.
- The programmed tracks / files is displayed in the right hand screen.
- Use [◀ / ▶] to go back / forward between the hierarchy of folders.

3 Press [▶ (play)] to start program playback.

- The program playback will start.



To exit from the program playback mode:

- Press [RETURN] in stop mode.

Note

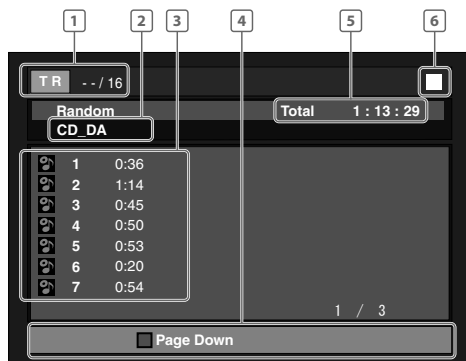
- During program playback, press [■ (stop)] once to set the resume point, and then press [▶ (play)] to resume program playback from where [■ (stop)] was pressed (audio CD) or from beginning of the file where [■ (stop)] was pressed (MP3 / WMA / JPEG).
- During program playback, press [■ (stop)] twice to display the program screen. To go back to the normal program playback, press [RETURN] to exit from the program screen, then press [▶ (play)].
- Up to 99 tracks / files can be entered.
- To repeat the current track / file in the program, press [REPEAT] repeatedly until "Track" appears during playback. To repeat the entire program, press [REPEAT] repeatedly until "All" appears during playback.
- Playback from a desired track / file and random playback are not available during program playback.
- Press [MODE] to switch to the random playback mode.
- The program will be cleared when;
 - the unit is turned into the standby mode.
 - the media mode is switched to the other mode.
 - the disc / card is removed. (as for "Disc" mode, just opening the disc tray will clear the program info.)

Random Playback



This function shuffles the playback order of tracks / files.

1 In stop mode, press [MODE] twice.



e.g.) audio CD

- 1 audio CD** : Track information
MP3 / WMA / JPEG : File information
- 2 audio CD** : "CD-DA" will be displayed.
MP3 / WMA / JPEG : Current Disc, SD Memory Card, or folder name will be displayed.
- 3 Track / File list** : Track / File list in the original order will be displayed.
- 4 Operation Guide** : Press [RED] to go to the previous page in the track / file list.
Press [GREEN] to go to the next page in the track / file list.
- 5 Total playback time of all tracks.** (audio CD only)
- 6 Playback status**

2 Press [▶ (play)] to start random playback.
To exit from the random playback mode:
• Press [MODE] in stop mode.

Note

- During the random playback, press [■ (stop)] once to set the resume point, and then press [▶ (play)] to resume random playback from where [■ (stop)] was pressed (audio CD) or from beginning of the file where [■ (stop)] was pressed (MP3 / WMA / JPEG).
- To repeat the current track / file in the random selection, press [REPEAT] repeatedly until "↺ Track" appears during playback. To repeat the entire random selection press [REPEAT] repeatedly until "↺ All" appears during playback.
- Playback from a desired track / file is not available during random playback.
- In stop mode, press [RETURN] to switch to the program playback mode.
- For a disc containing mixed MP3 and Windows Media™ Audio files, random playback of those files will be performed.

Adjusting the Picture



You can adjust the picture quality.

- 1 During playback, press [MODE] repeatedly until [Picture] appears.**
- 2 Use [▲ / ▼] to select your desired item, then use [◀ / ▶] to adjust the setting.**



e.g.) DVD-video

Black level

You can adjust the black level setting to make the black parts of the pictures as bright as you prefer. You can select "On" or "Off".

"On" : Makes the dark parts brighter.

"Off" : Shows the original picture as recorded.

Noise reduction (DVD-video only)

Reduces the noise of the playback picture.

"Off" : Shows the original picture as recorded.

"1" : Executes 3D noise reduction which detects and deletes the noise by comparing each picture frames.

"2" : Executes MPEG noise reduction which reduces the block noise and mosquito noise on the subtitle on movie.

"3" : Executes both MPEG noise reduction and 3D noise reduction.

3 Press [RETURN] to exit.

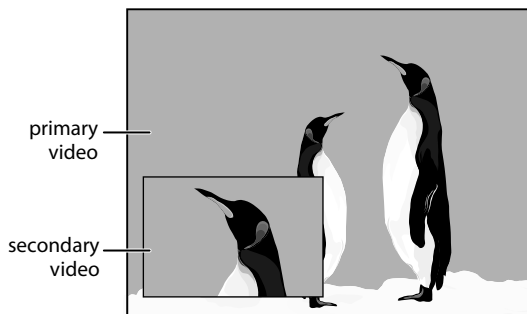
Note

- The setting will remain the same even if the unit is turned to the standby mode.
- "Black Level" is not effective under the following conditions.
 - When the picture is output from HDMI OUT jack.
 - When the picture is output from COMPONENT VIDEO OUT jacks with "Component Output" set to "480p / 720p / 1080i".

PIP (BONUSVIEW) Setting



Some BD-video have the PIP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing **[MODE]** whenever the scene contains the secondary video.



- 1 During playback, press [MODE] repeatedly until the PIP function appears.**
- 2 Use [▲ / ▼] to select the secondary video you want.**
 - The secondary video will be displayed and the secondary audio will be output.
 - Use [◀ / ▶] to switch between current setting and "Off".
- 3 Press [RETURN] or [MODE] to remove the PIP information.**

Note

- The secondary audio will not be output when the secondary audio is set to "Off" or when "BD Audio Mode" is set to "HD Audio Output". Refer to "Switching Audio Soundtrack" on page 31 and "Setting the BD Audio Mode" on page 32.

Camera Angle



Some BD-video and DVD-video contain scenes which have been shot simultaneously from various angles. You can change the camera angle when appears on the TV screen.

1 During playback, press [ANGLE].

- The selected angle will be displayed on the display bar at the top of the TV screen.

2 Use [▲ / ▼] to select your desired angle.



Note

- If "Angle Icon" setting is "Off" in "Others" menu, will not appear. Refer to page 40.

Search

Using [◀◀ / ▶▶] (skip)]

- 1 During playback, press [▶▶] (skip)] to move to the next track / title / chapter / file. Press it repeatedly to skip to subsequent tracks. Press [◀◀ (skip)] once to go back to the beginning of the current track. Press it repeatedly to go to the previous tracks.














- For JPEG files, press [◀◀ (skip)] to go back to the previous file.

Note

- For BD and DVD, if title contains no chapters, [◀◀ / ▶▶] (skip)] changes the title.
- For JPEG files, [◀ / ▶] is also available.

Using [SEARCH]

By using [SEARCH], you can select the following search modes.

Search mode	Available media
 /  Chapter / Title search	 
 Track search	   
 Time search	  

- 1 During playback, press [SEARCH] repeatedly until your desired search mode appears.
 - 2 Enter the desired chapter, title, track, file number or time to search for using [the Number buttons].
- Chapter, title, track or time search will start.
 - Press [CLEAR] to erase an incorrect input.

Note

- During program and random playback, search functions are not available except the search using [◀◀ / ▶▶] (skip)].
- Time search is available only in the same track, file or title.
- For BD, chapter and time search are available only during playback.

Using [the Number buttons] (Direct Search)

Title Search

In stop mode, enter the title number you want to search using [the Number buttons].

Playback of the title will start in a few seconds.

Chapter Search

During playback of a title, enter the chapter number you want to search using [the Number buttons].

Playback of the chapter will start in a few seconds.

Track / File Search

Enter the track / file number you want to search using [the Number buttons].

Playback of the track / file will start in a few seconds.

Note

- As for the BD-video, how it performs will be strongly determined by the disc, and may not perform as described here.

You can select the format of audio and video as you prefer depending on the contents of the disc you are playing back.

Switching Subtitles

Some video materials may have subtitles in 1 or more languages. For commercially available discs, the supported languages can be found on the disc case. Follow the steps below to switch the subtitle language during playback.



- 1 During playback, press [SUBTITLE].
- 2 Use [▲ / ▼] to select "Primary Subtitle", "Secondary Subtitle" or "Subtitle Style", then press [OK].

	Primary Subtitle	2 ENG/11
	Secondary Subtitle	2 ENG/11
	Subtitle Style	2/25

- "Primary Subtitle" : Sets the subtitle for the primary video.
- "Secondary Subtitle" : Sets the subtitle for the secondary video.
- "Subtitle Style" : Sets style of the subtitle.

- 3 Use [▲ / ▼] to select your desired subtitle or style.
 - Use [◀ / ▶] to switch between current subtitle setting and "Off".

- 4 Press [SUBTITLE] to exit.



- 1 During playback, press [SUBTITLE].
- 2 Use [▲ / ▼] to select your desired subtitle.

	1	ENG	/ 4	◄
--	---	-----	-----	---

- Use [◀ / ▶] to switch between current subtitle setting and "Off".

- 3 Press [SUBTITLE] to exit.

Note

- Some discs will only allow you to change the subtitles from the disc menu or pop-up menu. Press [TOP MENU] or [POP MENU / MENU] to display the disc menu or pop-up menu.
- If 4-digit-language code appears in the subtitle menu, refer to "Language Code List" on page 49.
- If the disc has no subtitle language or subtitle style, "Not Available" will be displayed on the TV screen.
- During playback of the secondary video, the primary subtitle setting is not available except when there is no subtitle for the secondary video.
- If you select a language that has a 3-letter-language code, the code will be displayed every time you change the subtitle language setting. If you select any other languages, "----" will be displayed instead. (Refer to page 49.)

Switching Audio Soundtrack

When playing back video material recorded with 2 or more soundtracks (these are often in different audio languages or audio formats), you can switch them during playback. For BD, available audio varies depending on "BD Audio Mode" setting. Refer to page 32 for more information.



- 1 During playback, press [AUDIO].
- 2 Use [▲ / ▼] to select "Primary" or "Secondary" audio to set, then press [OK].

	Primary			
	1	ENG	Dolby D	Multi-ch /3
	Secondary			
	2	ENG	Dolby D+	Multi-ch /3

- "Primary" : Sets the audio for the primary video.
- "Secondary" : Sets the audio for the secondary video.

- 3 Use [▲ / ▼] to select your desired audio stream channel.
 - For "Secondary", use [◀ / ▶] to switch between current audio setting and "Off".

- 4 Press [AUDIO] to exit.



- 1 During playback, press [AUDIO].
- 2 Use [▲ / ▼] to select your desired audio stream channel.

	1	ENG	Dolby D	3/2.1ch	48k	/ 3	◄
--	---	-----	---------	---------	-----	-----	---

e.g.) DVD-video

- For audio CD, you can select following options.

"Stereo" : Both right and left channels are active (stereo).

"L-ch" : Only left channel is active.

"R-ch" : Only right channel is active.

- 3 Press [AUDIO] to exit.

Note

- The secondary audio will not be output when the secondary video is not displayed or when "BD Audio Mode" is set to "HD Audio Output". (For some BD, secondary audio will be output even when secondary video is off.)
- The sound mode cannot be changed during playback of discs not recorded in multiple audio.
- Some discs allow changing the audio language setting on the disc menu. (Operation varies depending on the discs. Refer to the manual accompanying the disc.)
- **[AUDIO]** may not work on some discs with multiple audio streams or channels (e.g. DVDs that allow changing audio setting on the disc menu).
- If you select a language that has a 3-letter-language code, the code will be displayed every time you change the audio language setting. If you select any other languages, "----" will be displayed instead. (Refer to page 49.)
- If 4-digit-language code appears in the audio menu, refer to page 49.
- If the disc has no audio language, "Not Available" will be displayed on the TV screen.
- For DTS-CD (5.1 music disc), selecting audio streams or channels is not available.

Setting the BD Audio Mode



There are 2 options for the "BD Audio Mode" setting; either by setting the output to the secondary and interactive audio accompanied by the primary audio or by setting only the primary audio. Depending on the setting of the mode, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, or DTS-HD output changes between multi LPCM and Bitstream.

1 In stop mode with BD inserted, press [MODE].

2 Use [▲ / ▼] to select your desired setting.



"Mix Audio Output":

If it is available, BD-video's secondary and interactive audio will be output with the primary audio.

- The secondary audio is the audio for the secondary video (Director's comment etc.) and the interactive audio is the audio for the interactive application (Button click sounds etc.).

"HD Audio Output":

Only the primary audio will be output. Set this mode in order to output , Dolby Digital Plus, Dolby TrueHD, or DTS-HD audio of BD through HDMI connection.

3 Press [RETURN] to exit.

Note

- In "Mix Audio Output" mode, if there is no secondary and interactive audio, the audio will be output as "HD Audio Output" mode.
- You can also set "BD Audio Mode" from the setup menu. Refer to page 39.
- Refer to "Audio Output" on page 42 for how BD Audio will be output.

Volume Control

You can control the volume level of the audio output from 5.1ch speakers.

To increase or decrease the volume level :

Press [VOL. + / -].

- The volume level will increase or decrease, every time you press [VOL. +] or [VOL. -].
- The volume level will be displayed on the front panel display.

To turn off the volume temporarily :

Press [MUTE].

- To restore the volume, press [MUTE] again or press [VOL. + / -].
- "MUTE" will be displayed on the front panel display.

Note

- This function is only available for the audio output from 5.1ch speakers.
- Pressing [VOL. + / -] does not work while the setup menu is displayed.
- If you turn up the volume too much, the audio may get distorted. To enjoy clear sounds, please turn down the volume.

Selecting Surround Mode

Select the surround mode for the audio output from 5.1ch speakers.

1 During playback, press [SURROUND] repeatedly to select the desired surround mode.

"Off":

Turns off the surround mode.

"2.1ch Stereo":

Set the surround mode to "2.1ch Stereo".

(2.1ch Stereo sound from front left/right speakers.)

"Multi ch Stereo":

Set the surround mode to "Multi ch Stereo".

(5.1ch stereo sound from 5.1ch speakers.)

"Dolby Pro Logic II Movie":

Set the surround mode to "Dolby Pro Logic II Movie".

(Dolby Pro Logic II 5.1ch surround sound.)

"Dolby Pro Logic II Music":

Set the surround mode to "Dolby Pro Logic II Music".

(Dolby Pro Logic II 5.1ch surround sound.)

Note

- The availability of surround sound modes will depend on the audio source.
- In disc or SD card mode, pressing [SURROUND] does not work while in the Resume-On-Stop mode.
- In FM mode, pressing [SURROUND] does not work when no audio is being input.
- Pressing [SURROUND] does not work during playback of JPEG files.
- This function is effective only for the audio output from 5.1ch speakers.
- The volume will be restored If you press [SURROUND] when the audio is muted.
- For mulch-channel audio, "Multi ch Stereo", "Dolby Pro Logic II Movie" or "Dolby Pro Logic II Music" cannot be set.

Selecting Sound Effect Mode

Select the sound effect mode for the audio output from 5.1ch speakers to suit your video or music.

1 During playback, press [SOUND MODE] repeatedly to select the desired sound effect mode.

Video	Music	Description
Off	Off	Turns off the sound effect mode.
Action	Rock	Enhanced low and high-range. Ideal for action movies and rock or pop music.
Drama	Jazz	Clear mid and high-range. Ideal for drama movies and jazz music.
Concert	Classic	Neutral sound. Ideal for live concerts and classical music.
Sports	Sports	Moderate mid-range and surround effects for clear vocals and the atmosphere of a live sport venue.

Note

- In disc or SD card mode, pressing [SOUND MODE] does not work while in the Resume-On-Stop mode.
- In FM mode, pressing [SOUND MODE] does not work when no audio is being input.
- Pressing [SOUND MODE] does not work during playback of JPEG files.
- This function is effective only for the audio output from 5.1ch speakers.
- The volume will be restored if you press [SOUND MODE] when the audio is muted.

Switching Active Source Mode

You can change the active source mode to the desired external audio inputs and enjoy audio from the connected device with the multi-channel surround sound capabilities.

1 Press [SOURCE + / -].

- "Input Select" screen will appear.

2 Use [▲ / ▼] to select the desired source mode, then press [OK].

"Disc / SD":

Set the active source mode back to this unit.

"Aux":

Set the active source mode to the AUDIO IN(AUX) jacks.

"Coaxial":

Set the active source mode to the DIGITAL AUDIO IN (Coaxial) jack.

"MP3 Line-in":

Set the active source mode to the MP3 LINE-IN jack.

"FM":

Set the active source mode to the FM ANT 75Ω jack.

Note

- If you turn the unit into the standby mode, the active source mode will be switched to "Disc / SD".
- When selecting the source mode, it is necessary to view the "Input Select" screen on the TV.

Sleep Timer

The sleep timer enables the unit to switch to the standby mode automatically after the selected preset time.

To set the sleep timer :

Press [SLEEP] repeatedly to select the desired preset time.

"SLP OFF":

Turns off the sleep timer.

"SLP 15":

Set the preset turn-off time to 15 minutes.

"SLP 30":

Set the preset turn-off time to 30 minutes.

"SLP 60":

Set the preset turn-off time to 60 minutes.

"SLP 90":

Set the preset turn-off time to 90 minutes.

"SLP 120":

Set the preset turn-off time to 120 minutes.

"SLP 150":

Set the preset turn-off time to 150 minutes.

To check or change the setting :

Press [SLEEP] once to display the remaining time.

To change the setting, press [SLEEP] repeatedly until your desired preset time is displayed.

To cancel sleep timer :

Press [SLEEP] repeatedly until "SLP OFF" is displayed.

Note

- The sleep timer will be activated even if the unit is in operation.
- Pressing [SLEEP] does not work while the setup menu is displayed.

Play from Portable Media Player

Simply connect your portable media player (e.g. MP3 player) to this unit to enjoy superior sound quality from your music collections.

1 Connect your portable media player to the MP3 LINE-IN jack on this unit.

- Refer to "Connecting Portable Media Player" on page 16.

2 Turn on your portable media player.

3 Press [SOURCE + / -].

- "Input Select" screen will appear.

4 Use [▲ / ▼] to select "MP3 Line-in", then press [OK].

5 Start play music on your portable media player.

Note

- Control playback is only possible on the portable media player.
- Stop playback on the portable media player before you switch to other source mode.

Radio Operations

By connecting the supplied FM wire antenna, you can listen to FM radio on this unit.

Presetting Radio Stations

When you access radio mode for the first time, follow the instruction to store a radio station to your preset station list. You can store up to 40 FM radio stations in the memory.

- 1 Connect the supplied FM wire antenna to the FM ANT 75Ω jack on this unit.**
 - Refer to "Connecting FM Radio Antenna" on page 16.
- 2 Press [SOURCE + / -].**
 - "Input Select" screen will appear.
- 3 Use [▲ / ▼] to select "FM", then press [OK].**
- 4 Press [◀ / ▶].**
 - This unit will start tuning automatically until a radio station with sufficient signal strength is found.
 - If necessary, repeat press [◀ / ▶] again until you find the desired radio station.
 - To fine-tune the reception of a weak station, press [▲ / ▼] repeatedly until an optimal reception is found.
- 5 Press [OK].**
 - The radio station is added to the preset station list.

Note

- While auto tuning, audio will be muted until this unit finds a radio station with sufficient signal strength.

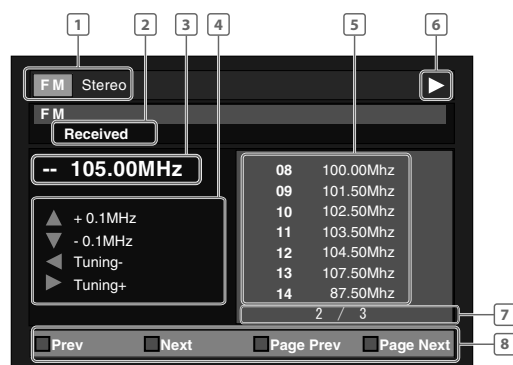
Listening to a Preset Radio Station

- 1 Follow steps 1) to 2) in "Presetting Radio Stations" on page 35.**
- 2 Use [RED] / [GREEN] to select the desired preset station.**
 - This unit will tune to the selected preset radio station.
 - To go to the previous / next page of the preset station list, press [BLUE] / [YELLOW].

Note

- You can also select the preset station by :
 - Entering the desired preset station number using **[the Number buttons]**.
 - Pressing [SEARCH] and then enter the desired preset station number using **[the Number buttons]**.
- You can change the audio mode(stereo or mono mode) by pressing [AUDIO] repeatedly.

Guide to the FM Radio Screen



- 1 FM icon / Audio mode (Stereo or Mono mode)**
- 2 Current status**
- 3 Frequency of current radio station**
- 4 Button guide for tuning**
- 5 Preset station list**
- 6 Playback status**
- 7 Current page / Total page number**
- 8 Operation Guide : Press [RED] to go to the previous station in the preset station list. Press [GREEN] to go to the next station in the preset station list. Press [BLUE] to go to the previous page in the preset station list. Press [YELLOW] to go to the next page in the preset station list.**

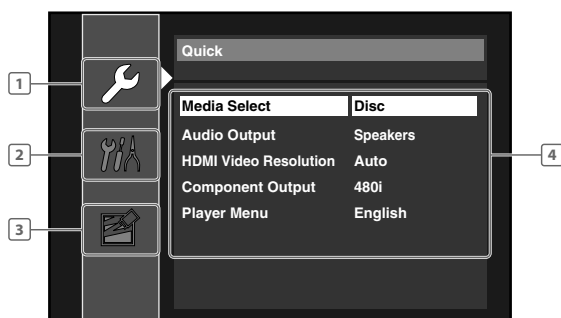
Deleting a Preset Radio Station

- 1 Follow steps 1) to 2) in "Presetting Radio Stations" on page 35.**
- 2 Use [RED] / [GREEN] / [BLUE] / [YELLOW] to select the desired preset station.**
- 3 Press [CLEAR].**
 - The selected station is deleted from the preset station list.

FUNCTION SETUP

In the setup menu screen, you can access various kinds of menus, and customize them as you prefer.
To call up the setup menu screen, press **[SETUP]**. Then follow the instructions below to navigate through the screen.

< Setup menu screen >









- 1 **Quick menu**
Contains only the frequently used menus.
- 2 **Custom menu**
Contains all the available setup menus.
- 3 **Initialize menu**
Contains the menus that relates to the initialization of the unit or the SD card.
- 4 **Menu window**
Displays the available items for the selected menu.

How to Navigate through the Setup Menus

- Use **[▲ / ▼]** to move the highlight up and down.
- Press **[OK]** to access the options of an item, to switch settings, or to confirm the selection.
- Use **[◀ / ▶]** to switch settings in some menus.
- Press **[RETURN]** to go back to the previous screen.
- Press **[SETUP]** to exit.

List of Setup Menus

Items with (*) can be accessed from “Quick” menu also.
The items highlighted in grey are the default setting.

Category		Menus / Options			Description	
Custom	Language	Audio	Original	Chinese	Turkish	Sets the audio language for BD-video or DVD-video playback. “Original”: Activates the disc’s original language. “Other”: If you select “Other”, enter 4-digit-code for the desired language (refer to page 49). Only the languages supported by the disc can be selected.
			English	Japanese	Greek	
			French	Korean	Irish	
			Spanish	Danish	Portuguese	
			German	Finnish	Polish	
			Italian	Norwegian	Czech	
			Swedish	Icelandic	Slovak	
			Dutch	Hungarian	Bulgarian	
			Russian	Romanian	Other	
	Subtitle	Off	Chinese	Turkish	Sets the subtitle language for BD-video or DVD-video playback. “Other”: If you select “Other”, enter 4-digit-code for the desired language (refer to page 49). Only the languages supported by the disc can be selected.	
			English	Japanese		Greek
			French	Korean		Irish
		Spanish	Danish	Portuguese		
		German	Finnish	Polish		
		Italian	Norwegian	Czech		
		Swedish	Icelandic	Slovak		
		Dutch	Hungarian	Bulgarian		
		Russian	Romanian	Other		
Disc Menu	English	Japanese	Greek	Sets the language for disc menu. “Other”: If you select “Other”, enter 4-digit-code for the desired language (refer to page 49). Only the languages supported by the disc can be selected.		
		French	Korean		Irish	
		Spanish	Danish		Portuguese	
		German	Finnish		Polish	
		Italian	Norwegian		Czech	
		Swedish	Icelandic		Slovak	
		Dutch	Hungarian		Bulgarian	
		Russian	Romanian		Other	
		Chinese	Turkish			

FUNCTION SETUP

Category		Menus / Options		Description
Custom	Language	Player Menu*	Auto (XXX) English Français Español	Sets the language for player menu. (on-screen display menu) "Auto": Activates the Get & Set Menu Language function (refer to page 44). • "Auto" is available only when "fun-Link(HDMI CEC)" is set to "On". • Inside the parentheses next to "Auto" will be currently selected language.
	Video	TV Aspect • Refer to page 42 for more information.	16:9 Wide 4:3 Pan & Scan 4:3 Letter Box 16:9 Squeeze	Sets the aspect ratio of the playback image to fit your TV.
		HDMI Video Resolution • This feature is available only when the display device is connected by an HDMI cable.	Auto 480p	Sets the resolution of the video signal being output from the HDMI OUT jack. "Auto": HDMI video resolution will be selected automatically depending on the connected HDMI device.
		HDMI Deep Color • This feature is available only when the display device is connected by an HDMI cable, and when it supports Deep Color feature.	Auto Off	Reduces the posterization effect of the playback picture. "Auto": Reduces the posterization effect by automatically outputting up to 36 bit color whenever the unit recognizes the connected display device supports Deep Color feature. "Off": Outputs the standard 24 bit color.
		Component Output*	480i 480p 720p 1080i	Sets resolution for component output picture.
		Progressive Mode	Auto Video	Sets the optimum progressive mode for the image material output from HDMI OUT jack and COMPONENT VIDEO OUT jacks. "Auto": The progressive mode will detect 24-frame film material (movies) and automatically select appropriate progressive mode. "Video": Suited for playing back video material discs (TV shows or animation).

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Category		Menus / Options	Description
Custom	Video	Still Mode	<p>Adjusts picture resolution and quality in still mode.</p> <p>"Auto": Automatically selects the best resolution setting ("Frame" or "Field") based on the data characteristics of the pictures.</p> <p>"Field": Stabilizes the pictures, although the picture quality may become coarse due to the limited amount of data. Select "Field" when the pictures are still unstable even if "Auto" is selected.</p> <p>"Frame": Displays relatively motionless pictures in higher resolution. "Frame" improves the picture quality, although it may unstabilize the pictures due to alternate output of 2-field data.</p> <ul style="list-style-type: none"> An individual picture on the TV screen is called "Frame", which consists of two separate images called "Field". Some pictures may be blurred at the auto setting in "Still Mode" setting due to their data characteristics.
		Auto	
		Field	
		Frame	

Note for "HDMI Video Resolution" and "Component Output"

- Even if you set "HDMI Video Resolution" setting to "Auto", when this unit is connected to a DVI compatible display devices with an HDMI-DVI cable, 480p signal will be output.
- Video and audio signals may be distorted temporarily when switching to / from the HDMI output mode.
- You cannot change the video resolution during Blu-ray Disc playback. To change the resolution, stop playback.
- In order to get natural and high quality film reproduction of 24-frame film material, use an HDMI cable (High Speed HDMI Cable is recommended) and select "Auto" if the connected TV is compatible with 1080p24 frame input.
- Even if the connected TV is compatible with 1080p24 frame input and you set "HDMI Video Resolution" setting to "Auto", when the contents of the disc are not compatible for 1080p24 frame, 1080p60 frame will be output.
- If the picture is not output properly to the TV because of "HDMI Video Resolution" or "Component Output" setting, press and hold [PLAY ►] on the front panel for more than 5 seconds. Both settings will be reset to the default automatically.
- For video resolution of the component output, you can only select the video resolution which is currently output from HDMI OUT jack or "480i" if HDMI cable is connected.
- If you change "HDMI Video Resolution" setting or set the setting to "Auto", the video resolution for the component output will be switched to "480i".
- If you play back copy-protected DVD-video, 480p signal will be output from COMPONENT VIDEO OUT jacks, when "Component Output" setting is set to "720p" or "1080i".
- With some copy-protected BD-video, the video image may only be output from HDMI OUT jack.
- Refer also to your TV's manual.

FUNCTION SETUP

Custom

Category	Menus / Options					Description
Audio	BD Audio Mode 	Mix Audio Output HD Audio Output				For BD, selects whether to output the secondary and interactive audio with primary audio if it is available or only the primary audio. Refer to "Setting the BD Audio Mode" on page 32. "Mix Audio Output": The audio for the secondary video and the interactive application will be output together with the audio for the primary video. "HD Audio Output": Outputs only the primary audio. Set this mode in order to output Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD audio of BD through HDMI connection.
	Audio Output* • Refer to page 42 for more information.	Speakers HDMI Normal HDMI LPCM				"Speakers" Audio will be output from the 5.1ch speakers. "HDMI Normal" The Multi-channel audio signals are output from HDMI OUT jack with Bitstream or LPCM depending on the material. "HDMI LPCM" The Multi-channel or stereo audio signals are output from HDMI OUT jack with LPCM.
	Speaker Setup • This feature is available only when "Audio Output" is set to "Speakers". (Refer to page 42.)	Surround Effects • Sets the surround effect of audio when the setting of surround mode is set to "Dolby Pro Logic II Movie" or "Dolby Pro Logic II Music". (Refer to "Selecting Surround Mode" on page 33.)	Center Width	0~7	default is 3	Adjust the sound balance between center and front speakers.
			Dimension	-3~3	default is 0	Adjust the sound balance between front and rear speakers.
			Panorama	On Off		"On": Sets the sound of center speaker to have surround-sound effect. "Off": Sets the sound of center speaker to normal.
Channel Level • Tests or sets the volume for each speaker.		Test Tone	Off Manual Auto		"Off": Deactivates the Test Tone. "Manual": Allows you to manually select the speaker to test. "Auto": Automatically tests all speakers. • To stop the test tone, press [RETURN].	
			Front Lch	-10dB ~ +10dB	default is 0	Sets the volume level for each speaker to get ideal audio balance.
			Center		default is 0	
			Subwoofer		default is 0	
	Front Rch		default is 0			
	Surround Rch		default is 0			
	Surround Lch	default is 0				
Default			Sets the volume level of all speakers to the default setting.			

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Category	Menus / Options				Description	
Audio	Speaker Setup • This feature is available only when “Audio Output” is set to “Speakers”. (Refer to page 42.)	Delay Time • This is a parameter for optimizing the timing at which the sound outputs from the speakers according to the distance from the listening position.	Distance	Feet	Sets the unit of measure for “Delay Time”.	
				Meters		
			Front		default is 3	
			Center		default is 3	
	Surround		default is 3			
				Feet : 0 ~ 15 Meters : 0 ~ 4.5	• If you change the setting of “Front”, the setting of “Center” and “Surround” will be set to the same setting automatically. • If you set “Front” to 0 ft (0m), you can only select 0 ft (0m) for “Center” and “Surround”. • Difference of the values among “Front” and “Center” cannot exceed 5 ft (1.5m).	
			Default		Sets the unit of measure and all delay time settings to the default setting.	
	DRC	On				Sets whether to compress the range of sound volume (dynamic range control) when Dolby Digital, Dolby Digital Plus or Dolby TrueHD audio is played back.
		Off				
Parental • Refer to page 44 for more information.	Password input field	BD Rating Level	All			Sets the rating level for the BD playback.
			Age Setting			
		DVD Rating Level	All			Sets the rating level for the DVD playback.
			8 [Adult] to 1 [Kid Safe]			
		Password Change	Password input field		Sets the new password for “Parental” setting.	
Others	Angle Icon	On				Sets whether to display the angle icon on the TV when playing back the scene with various angles.
		Off				
	Panel Display	Auto				Sets the brightness of the front panel display. “Auto”: Front panel display gets darker during playback. “Bright”: Front panel display gets brighter. “Dimmer”: Front panel display gets darker.
		Bright				
		Dimmer				
	fun-Link(HDMI CEC) • This feature is available only when the display device is connected with an HDMI cable, and when it supports fun-Link(HDMI CEC) feature. • Refer to page 44 for more information.	On				Sets whether to utilize the fun-Link(HDMI CEC) function.
		Off				
	Media Select*	Disc				Select the media to play back.
		SD Card				
	Software Update • Refer to page 45 for more information.	Current Version				Indicates the current software version.
		Disc Update	No			Allows you to update this unit’s software using a disc.
			Yes			

FUNCTION SETUP

Category		Menus / Options	Description
Initialize	Setup	No	Resets all the settings, except for "Parental" to the factory default.
		Yes	
	Format SD Card	No	Re-formats SD card.
		Yes	
	Erase Saved BD-ROM Data (Player)	No	Re-formats local storage (Player) used for BD-Java.
		Yes	
	Erase Saved BD-ROM Data (SD Card)	No	Re-formats local storage (SD card) used for BD-Java.
		Yes	

• Refer to page 45 for more information.

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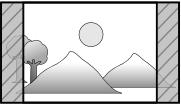
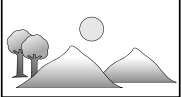
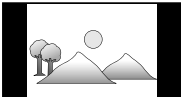
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TV Aspect

[SETUP] → "Custom" → "Video" → "TV Aspect"

Use this feature to adjust the aspect ratio of the video source which is different from your TV's ratio to fit your TV monitor without distorting the picture. Descriptions of each setting are as follows:

Video source	Your TV	Option	Description
16:9	4:3	4:3 Letter Box 	To enjoy 16:9 picture on 4:3 monitor: 16:9 picture is scaled down until both sides of the picture fits the 4:3 TV.
		4:3 Pan & Scan 	To enjoy 16:9 picture on 4:3 monitor: Both sides of the picture are trimmed to fit the 4:3 TV without distorting the aspect ratio of the picture.
4:3	16:9	16:9 Wide 	To enjoy 16:9 picture on 16:9 monitor: Select this setting when you want to enjoy 16:9 picture on the 16:9 TV.
		16:9 Squeeze 	To enjoy 4:3 picture on 16:9 monitor: Use this setting to display 4:3 picture on the 16:9 TV without distorting the aspect ratio of the picture.

Audio Output

[SETUP] → "Custom" → "Audio" → "Audio Output"

If you set to "Speakers" :

The audio output from the 5.1ch speakers differs depending on the audio source and the setting of surround mode. (Refer to "Selecting Surround Mode" on page 33.)

If you set to "HDMI Normal" or "HDMI LPCM" :

Refer to the table below for the audio output from HDMI OUT jack.

	"Audio Output" setting →	"HDMI Normal"		"HDMI LPCM"	
	"BD Audio Mode" setting →	"HD Audio Output"	"Mix Audio Output"	"HD Audio Output"	"Mix Audio Output"
Media ↓	Audio Source ↓	Which audio format can be output depends on the compatibility of the connected device.			
BD-video	Dolby Digital	Dolby Digital or Multi LPCM or Mute	Dolby Digital or Multi LPCM or Mute	Multi LPCM or Mute	Multi LPCM or Mute
	Dolby Digital Plus	Dolby Digital Plus or Dolby Digital or Multi LPCM*1 or Mute	Dolby Digital or Multi LPCM*1 or Mute	Multi LPCM*1 or Mute	Multi LPCM*1 or Mute
	Dolby TrueHD	Dolby TrueHD or Dolby Digital or Multi LPCM*2 or Mute	Dolby Digital or Multi LPCM*2 or Mute	Multi LPCM*2 or Mute	Multi LPCM*2 or Mute

FUNCTION SETUP

	"Audio Output" setting →		"HDMI Normal"		"HDMI LPCM"	
	"BD Audio Mode" setting →		"HD Audio Output"	"Mix Audio Output"	"HD Audio Output"	"Mix Audio Output"
Media ↓	Audio Source ↓		Which audio format can be output depends on the compatibility of the connected device.			
BD-video	DTS®		DTS® or Multi LPCM or Mute	DTS® or Multi LPCM or Mute	Multi LPCM or Mute	Multi LPCM or Mute
	DTS-HD®		DTS-HD® or DTS® or Multi LPCM* ³ or Mute	DTS® or Multi LPCM* ³ or Mute	Multi LPCM* ³ or Mute	Multi LPCM* ³ or Mute
	LPCM		Multi LPCM or Mute	Multi LPCM or Mute	Multi LPCM or Mute	Multi LPCM or Mute
DVD-video	Dolby Digital		Dolby Digital, Multi LPCM or Mute		Multi LPCM or Mute	
	DTS®		DTS®, Multi LPCM or Mute		Multi LPCM or Mute	
	LPCM		2ch LPCM or Mute		2ch LPCM or Mute	
DTS-CD	DTS®		DTS®, Multi LPCM or Mute		Multi LPCM or Mute	
Audio CD	PCM		2ch LPCM or Mute		2ch LPCM or Mute	
MP3	MP3		2ch LPCM or Mute		2ch LPCM or Mute	
Windows Media™ Audio	WMA		2ch LPCM or Mute		2ch LPCM or Mute	
External audio input (DIGITAL AUDIO IN)	Dolby Digital		Dolby Digital or Multi LPCM or Mute		Multi LPCM or Mute	
	DTS®		DTS® or Multi LPCM or Mute		Multi LPCM or Mute	
	LPCM		2ch LPCM or Mute		2ch LPCM or Mute	
External audio input (AUX / MP3 LINE-IN)	Analog audio		2ch LPCM or Mute		2ch LPCM or Mute	
FM	Analog audio		2ch LPCM or Mute		2ch LPCM or Mute	

*1) Only the independent substream is decoded.

*2) Only the Dolby Digital substream is decoded.

*3) Only the core substream is decoded.

- When playing back a BD-video which only contains the primary audio, the audio output will be the same case as the "HD Audio Output" even if the "BD Audio Mode" is set to "Mix Audio Output".
- If you unplug the HDMI cable when "Audio Output" is set to "HDMI Normal" or "HDMI LPCM", the audio will be output from 5.1ch speakers.

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Parental

[SETUP] → "Custom" → "Parental"

Some BD-videos or DVD-videos feature a parental lock level. Playback will stop if the ratings exceed the levels you set, it will require you to enter a password before the disc will play back. This feature prevents your children from viewing inappropriate material.

- 1 Use [▲ / ▼] to select "🔒", then press [OK].
 - Password input field appears.
- 2 If a password has not been set, follow A).
 - If a password has already been set, follow B).
 - If you want to change the password, follow B) and C).
 - If you forget the password, follow D).
- A) Enter 4 digit password using [the Number buttons].
 - "4737" cannot be used.
- B) Enter 4 digit password.
- C) Select "Password Change", then press [OK]. Enter the new password.
- D) Enter "4737". Current password and "Parental" settings are now cleared. Enter a new password.
- 3 Select the desired item to set the rating level for, then press [OK].
- 4 Select the desired rating level, then press [OK].

<BD rating level>

All	Sets no limit.
Age Setting	Allows you to enter the age to limit, and prohibits the playback of a disc whose rating level exceeds the age setting entered here. <ul style="list-style-type: none"> • Enter the age as a 3-digit-number. (e.g., For age 15, enter [0], [1], [5].)

<DVD rating level>

All	Parental control is inactive; all discs can be played back.
8 [Adult]	DVD software of any grades (adult / general / children) can be played back.
7 [NC-17]	No one under 17 admitted.
6 [R]	Restricted; under 17 requires accompanying parent or adult guardian.
5 [PGR]	Parental Guidance Recommended.
4 [PG-13]	Unsuitable for children under 13.
3 [PG]	Parental Guidance suggested.
2 [G]	General audience.
1 [Kid Safe]	Suitable for children.

To Cancel Parental Lock Temporarily

Some discs allow you to cancel the parental lock temporarily. With those discs, the message below will appear when you try to play them back.
 "Enter current password."
 Follow the instruction which appears on the TV screen to cancel the parental lock.

fun-Link(HDMI CEC)

[SETUP] → "Custom" → "Others" → "fun-Link(HDMI CEC)"

You can control all fun-Link(HDMI CEC) compatible components connected via an HDMI cable by simple button operations of the remote control of this unit. In order to enable the function, you need to set "fun-Link(HDMI CEC)" to "On".

One Touch Play

When the operations with following buttons of the remote control of this unit are performed, the TV will automatically be turned on and switched to the appropriate input channel.

Buttons for one touch play:

- [▶ (play)], [◀◀ (skip)], [▶▶ (skip)], [the Number buttons], [DISPLAY], [SETUP], or [SOURCE + / -]
- [TOP MENU], or [POP MENU / MENU] (when a disc is inserted in the unit)

Standby

When you press and hold [STANDBY/ON ⏻] for 2 seconds, it turns off the power of the TV first and then turns off the power of this unit.

When the connected fun-Link(HDMI CEC) compatible display device is turned off, this unit may also turn off together.

System Information

Get & Set Menu Language

The unit recognizes the OSD language set for the TV and automatically sets the same language as the player menu language (OSD menu language) for this unit.

- This feature is available only when "Auto (XXX)" is selected in "Player Menu" in the setup menu. (Refer to page 37.)

System Audio Control

When you set your TV to output the audio from the 5.1ch speakers through this unit, you can control the volume level or mute the audio using TV's remote control. (For more details, refer to the owner's manual of your TV.)



Note

- For external input mode, "One Touch Play" is not available.
- Volume level will be displayed on the front panel display.
- If you change the speaker setting of your TV to output the audio from TV's speaker, 5.1ch speakers will be muted. (To restore the volume, use the remote control of this unit.)
- When you turn this unit into standby mode, TV's speaker will be activated automatically.
- Depending on the connected TV, two device names ("MAGNAVOX BD" and "Audio System") may be displayed in the device list of TV's menu screen. To select this unit, please select "MAGNAVOX BD".

Software Update

Current Version

You can confirm the current software version.

- 1 In stop mode, press [SETUP].
- 2 Use [▲ / ▼] to select , then press [OK].
- 3 Use [▲ / ▼] to select , then press [OK].
- 4 Use [▲ / ▼] to select "Software Update", then press [OK].
- 5 Use [▲ / ▼] to select "Current Version", then press [OK].
- 6 Press [OK] or [RETURN] to exit.

Note

- Please visit www.magnavox.com to download the latest software version.

Disc Update

You can update the software by using disc.

- 1 Prepare a software update disc:
Please access www.magnavox.com, and download the latest software to a blank disc by following the direction described on the site.

There are 2 types of software files for MRD410B: E1S12UD and E1S10UD.

The file name for this unit is E1S12UD.

Make sure to download the correct file when updating the software.


- Use a blank disc and download one software per a disc.
 - For more details on how to download the software, please refer to the site.
- 2 Follow steps 1 to 4 in "Current Version" on page 45.
 - 3 Use [▲ / ▼] to select "Disc Update", then press [OK].
 - Confirmation message will appear.
 - 4 Use [▲ / ▼] to select "Yes", then press [OK].
 - Disc tray will open automatically.
 - Insert the software update disc created at step 1 and then press [OPEN/CLOSE ▲].
 - 5 After completing loading disc, confirmation message will appear.
Use [◀ / ▶] to select "Yes" and press [OK] to start updating.
 - It may take a while to complete the updating.
 - 6 After the disc update finishes, this unit will restart and eject the disc automatically.

Note

- You can check the current software version in "Current Version" in "Software Update" menu.
- Please do not unplug the AC power cord while executing "Disc Update".
- All settings will remain the same even if you update the software version.

Initialize

Initialize the setting or SD Memory Card.

- 1 In stop mode, press [SETUP].
- 2 Use [▲ / ▼] to select , then press [OK].
- 3 Use [▲ / ▼] to select a desired option, then press [OK].

"Setup":

Resets the setup menu to the default.

"Format SD Card":

(Available only when an SD Memory Card is inserted.):

Initializes the SD Memory Card. After confirmation message appears, use [▲ / ▼] to select "Yes", then press [OK].

"Erase Saved BD-ROM Data (Player)":

Clears the data saved for the BD-ROM contents, such as BD-ROM game scores, from this player.

"Erase Saved BD-ROM Data (SD Card)":

(Available only when an SD Memory Card is inserted.):

Clears the supplemental data for the BD-ROM playback, such as subtitle data, from the SD Memory Card.

- 4 Press [OK]. (For "Setup" and "Format SD Card" only)
 - Final confirmation message will appear. Select "Yes", then press [OK].
- 5 Press [SETUP] to exit.

Note

- The setting for "Parental" will not be reset.

Caution

- Do not remove the SD Memory Card while executing the "Format SD Card" or the "Erase Saved BD-ROM Data (SD Card)". It damages the card.

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Troubleshooting

If the unit does not perform properly when operated as instructed in this manual, check the unit, consulting the following checklist.

Problem	Solution
No power	<ul style="list-style-type: none"> - Check if the AC cord is properly connected. - Unplug the AC cord once, and wait for 5-10 seconds and then plug it in again.
No sound or picture	<ul style="list-style-type: none"> - Check if the connected TV is turned on. - Check if the connections are made securely and correctly. - Check whether the connected TV or other device supports HDCP. (This unit will not output a video signal unless the other device supports HDCP.) - Check whether the output format of this unit (HDMI FORMAT) matches the supported input format of other connected device.
No audio / video signal on the display device via HDMI cable	<ul style="list-style-type: none"> - If the unit is connected to the unauthorized display device with an HDMI cable, the audio / video signal may not be output. - Perform an HDMI cable hotplug, wherein you disconnect the HDMI cable from the TV and this unit and then reconnect it to both the devices while they are powered on. - Ensure that your HDMI cable is certified.
Distorted picture	<ul style="list-style-type: none"> - Sometimes a small amount of picture distortion may appear. This is not a malfunction. - Connect this unit directly to the TV. If the audio / video cables are connected to a VCR, pictures may be distorted due to the copy right protection system.
Completely distorted picture or black / white picture with BD / DVD	<ul style="list-style-type: none"> - Make sure the disc is compatible with this unit.
No sound or distorted sound	<ul style="list-style-type: none"> - Adjust the volume. - Check the settings in "Audio" menu.
No audio signal from the loudspeakers of the TV connected via an HDMI cable	<ul style="list-style-type: none"> - Set "Audio Output" to "HDMI Normal" or "HDMI LPCM" in the settings menu. - Ensure that the TV's speakers are turned on in the TV menu. - Ensure that the TV speakers are not muted.
No audio from the speaker system	<ul style="list-style-type: none"> - Increase the volume level of the speaker system. - Set "Audio Output" to "Speakers" in the setup menu. - Make sure that audio is not muted. - Make sure you have selected the correct active source for external audio input.
No 5.1-channel audio from the speaker system	<ul style="list-style-type: none"> - Does the disc contain 5.1-channel audio? The 5.1-channel audio is not available when the disc does not contain it. - Set "Audio Output" to "Speakers" in the setup menu. - Make sure that the surround mode is not set to "2.1ch Stereo". When listening to a stereo (2 channel) source, press [SURROUND] and select "Dolby Pro Logic II Music" or "Dolby Pro Logic II Movie" to upmix the stereo source to 5.1 channel surround.
Picture freezes momentarily during playback	<ul style="list-style-type: none"> - Check the disc for fingerprints / scratches and clean with a soft cloth wiping from center to edge. - Clean the disc.
Disc cannot be played back	<ul style="list-style-type: none"> - Clean the disc. - Ensure the disc label is facing up. - Check if the disc is defective by trying another disc. - Cancel the ratings control or change the control level. - Insert a correct disc that can be played back on this unit.
SD Memory Card cannot be read	<ul style="list-style-type: none"> - The format of the card does not match that accepted by this unit or the card is not compatible.
No return to start-up screen when disc is removed	<ul style="list-style-type: none"> - Reset this unit by turning it off, then on again.
The unit does not respond to the remote control	<ul style="list-style-type: none"> - Aim the remote control directly at infrared sensor window on the front panel. - Reduce the distance to infrared sensor window. - Replace the batteries in the remote control. - Re-insert the batteries with their polarities (+ / - signs) as indicated.
Buttons do not work or the unit stops responding	<ul style="list-style-type: none"> - To completely reset the unit, press and hold [STANDBY/ON ⏻] on the front panel for 10 seconds to shut down the unit or unplug the AC cord from the AC outlet for 15-20 seconds.

Problem	Solution
The unit does not respond to some operating commands during playback	- Operations may not be permitted by the disc. Refer to the instructions of the disc.
The unit cannot read BD / DVD / CD	- Condensation? (Let sit 1 or 2 hours) - You are attempting to playback a disc other than one with one of the Logos on page 18. - Wipe the dirt off the disc or replace the disc.
Angle does not switch	- The angle cannot be switched for BD / DVD which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.
Playback does not start when the title is selected	- Check the settings in "Parental" menu.
The password for rating level has been forgotten	- Enter the default password "4737", then your forgotten password will be cleared.
Radio reception is poor	- If the signal is too weak, adjust the antenna or connect an external antenna for better reception. - Increase the distance between this unit and your TV or VCR. - Tune in to the correct frequency. - Place the antenna further away from any equipment that may be causing the interference.

Note

- Some functions are not available in specific modes, but this is not a malfunction. Read the description in this manual for details on correct operations.
- Some functions are prohibited on some discs.

Glossary

Analog Audio

An electrical signal that directly represents sound. Compare this to digital audio which can be an electrical signal, but is an indirect representation of sound. See also "Digital Audio".

Aspect Ratio

The width of a TV screen relative to its height. Conventional TVs are 4:3 (in other words, the TV screen is almost square); widescreen models are 16:9 (the TV screen is almost twice as wide as it is high).

BD-Java

With some BD which support Java applications, you can enjoy the interactive functions such as games or interactive menus.

Blu-ray Disc (BD)

Blu-ray Disc is a next generation optical video disc which is capable of storing much more data than a conventional DVD is. The large capacity makes it possible to benefit from the features such as high-definition videos, multi-channel surround sounds, interactive menus and so on.

Chapter

Just as a book is split up into several chapters, a title on a BD-video or DVD-video is usually divided into chapters. See also "Title".

Component Video Output

Each signal of luminance (Y) and component (P_B/C_B, P_R/C_R) is independent to output so that you can experience picture Color as it is. Also, due to compatibility with progressive video 480p, you can experience higher-density picture than that in interlace 480i.

Digital Audio

An indirect representation of sound by numbers. During recording, the sound is measured at discrete intervals (44,100 times a second for CD audio) by an analog-to-digital converter, generating a stream of numbers. On playback, a digital-to-analog converter generates an analog signal based on these numbers. See also "Sampling Frequency" and "Analog Audio".

Dolby Digital

The system to compress digital sound developed by Dolby Laboratories. It offers you sound of stereo (2ch) or multi-channel audio.

Dolby Digital Plus

Dolby Digital Plus is the next generation digital audio compression technology developed as an extension to Dolby Digital. Blu-ray Disc supports 7.1 multi-channel surround sound output.

Dolby Pro Logic II

Dolby Pro Logic II technology processes any high quality stereo (two-channel) movie and music audio into five playback channels of full-bandwidth surround sound. A matrix surround decoding technology, Dolby Pro Logic II detects the directional cues that occur naturally in stereo content and uses these elements to create a five-channel surround sound playback experience.

Dolby TrueHD

Dolby TrueHD is a lossless coding technology developed for next generation optical discs. Blu-ray Disc supports 7.1 multi-channel surround sound output.

DTS® (Digital Theater System)

DTS® is a multi-channel surround sound system. By connecting to DTS decoder, you can enjoy movie dynamic and realistic sound like movie theater. DTS surround sound technologies were developed by DTS, Inc.

DTS-HD®

DTS-HD® is a lossless coding technology developed as an extension of the original DTS Coherent Acoustics format. Blu-ray Disc supports 7.1 multi-channel surround sound output.

HDMI (High-Definition Multimedia Interface)

A digital interface between audio and video source. It can transmit component video, audio, and control signal with one cable connection.

JPEG (Joint Photographic Experts Group)

JPEG is a method of compressing still picture files. You can copy JPEG files on BD-RE/-R, DVD-RW/-R, CD-RW/-R or SD Memory Card from a computer and play back the files in this unit.

MP3 (MPEG audio layer 3)

MP3 is a method of compressing files. You can copy MP3 files on BD-RE/-R, DVD-RW/-R, CD-RW/-R or SD Memory Card from the computer and play back the files on this unit.

PCM (Pulse Code Modulation)

The most common system of encoding digital audio, found on CD and DAT. Excellent quality that requires a lot of data compared to formats such as Dolby Digital and MPEG audio. For compatibility with digital audio recorders (CD, MD and DAT) and AV amplifiers with digital inputs, this unit can convert Dolby Digital, DTS, and MPEG audio to PCM. See also "Digital Audio".

Region Code

Regions associate discs and players with particular areas of the world. This unit will only play back discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

Sampling Frequency

The rate which sound is measured by a specified interval to turn into digital audio data. The numbers of sampling in one second defines as sampling frequency. The higher the rate, the better the sound quality.

Title

A collection of chapters on BD-video or DVD-video. See also "Chapter".

Track

Audio CD use tracks to divide up the content of a disc. The BD-video or DVD-video equivalent is called a chapter. See also "Chapter".

Windows Media™ Audio

Windows Media™ Audio is the audio compressing technology developed by Microsoft. You can copy Windows Media™ Audio files on BD-RE/-R, DVD-RW/-R, CD-RW/-R or SD Memory Card from a computer and play them back on this unit.

Language Code List

Language	Code	Language	Code	Language	Code	Language	Code
A-B		French [FRE]	5264	Macedonian	5957	Siswat	6565
Abkhazian	4748	Frisian	5271	Malagasy	5953	Slovak [SLO]	6557
Afar	4747	Galician	5358	Malay	5965	Slovenian	6558
Afrikaans	4752	Georgian	5747	Malayalam	5958	Somali	6561
Albanian	6563	German [GER]	5051	Maltese	5966	Spanish [SPA]	5165
Amharic	4759	Greek [GRE]	5158	Maori	5955	Sundanese	6567
Arabic	4764	Greenlandic	5758	Marathi	5964	Swahili	6569
Armenian	5471	Guarani	5360	Moldavian	5961	Swedish [SWE]	6568
Assamese	4765	Gujarati	5367	Mongolian	5960	T	
Aymara	4771	Hausa	5447	Nauru	6047	Tagalog	6658
Azerbaijani	4772	Hebrew	5569	Nepali	6051	Tajik	6653
Bashkir	4847	Hindi	5455	Norwegian [NOR]	6061	Tamil	6647
Basque	5167	Hungarian [HUN]	5467	O-R		Tatar	6666
Bengali; Bangla	4860	I-K		Occitan	6149	Telugu	6651
Bhutani	5072	Icelandic [ICE]	5565	Oriya	6164	Thai	6654
Bihari	4854	Indonesian	5560	Oromo (Afan)	6159	Tibetan	4861
Bislama	4855	Interlingua	5547	Panjabi	6247	Tigrinya	6655
Breton	4864	Interlingue	5551	Pashto; Pushto	6265	Tonga	6661
Bulgarian [BUL]	4853	Inupiak	5557	Persian	5247	Tsonga	6665
Burmese	5971	Irish [IRI]	5347	Polish [POL]	6258	Turkish [TUR]	6664
Byelorussian	4851	Italian [ITA]	5566	Portuguese	6266	Turkmen	6657
C-E		Japanese [JPN]	5647	[POR]		Twí	6669
Cambodian	5759	Javanese	5669	Quechua	6367	U-Z	
Catalan	4947	Kannada	5760	Rhaeto-Romance	6459	Ukrainian	6757
Chinese [CHI]	7254	Kashmiri	5765	Romanian	6461	Urdu	6764
Corsican	4961	Kazakh	5757	[RUM]		Uzbek	6772
Croatian	5464	Kinyarwanda	6469	Russian [RUS]	6467	Vietnamese	6855
Czech [CZE]	4965	Kirghiz	5771	S		Volapuk	6861
Danish [DAN]	5047	Kirundi	6460	Samoa	6559	Welsh	4971
Dutch [DUT]	6058	Korean [KOR]	5761	Sangho	6553	Wolof	6961
English [ENG]	5160	Kurdish	5767	Sanskrit	6547	Xhosa	7054
Esperanto	5161	L-N		Scots Gaelic	5350	Yiddish	5655
Estonian	5166	Laothian	5861	Serbian	6564	Yoruba	7161
F-H		Latin	5847	Serbo-Croatian	6554	Zulu	7267
Faroese	5261	Latvian; Lettish	5868	Sesotho	6566		
Fiji	5256	Lingala	5860	Setswana	6660		
Finnish [FIN]	5255	Lithuanian	5866	Shona	6560		
				Sindhi	6550		
				Singhalese	6555		

Note

- If you choose a language that has a 3-letter-language code (written in bracket), the code will be displayed every time you change the audio or subtitle language setting on page 31. If you choose any other languages, "----" will be displayed instead.

OTHERS

Specifications

General

Signal system	NTSC Color
Power requirements	120 V AC, 60 Hz
Power consumption	70 W (standby: 0.6 W)
Total output power (Amplifier)	Home theater mode: 1000 W FTC* output power : 700 W *(Main Ch @ 1 kHz within 10% THD, Sub Ch 60 Hz within 2.5% THD)
Dimensions (width x height x depth)	17.2 x 2.4 x 11.7 inches (435 x 59 x 297 mm)
Weight	Total weight: 27.56 lbs. (12.50 kg) Main unit: 8.16 lbs. (3.70 kg)
Operating temperature	41°F (5°C) to 104°F (40°C)
Operating humidity	Less than 80 % (no condensation)

Terminals

Front	SD card slot slot x 1			
	MP3 LINE-IN jack mini jack x 1	500 mVp-p (75Ω)		
Rear	Analog audio output (SPEAKERS (4Ω)) Front and rear speakers	System: Full range satellite Impedance: 4Ω Frequency response: 180 Hz ~ 20 kHz Dimensions: 3.9 x 5.1 x 4.0 inches (100 x 130 x 100.5 mm) Weight: front - 1.19 lbs. (0.54 kg) rear - 1.13 lbs. (0.51 kg)		
	Center speaker	System: Full range satellite Impedance: 4Ω Frequency response: 180 Hz ~ 20 kHz Dimensions: 3.9 x 5.1 x 4.0 inches (100 x 130 x 100.5 mm) Weight: 1.61 lbs. (0.73 kg)		
	Subwoofer	Impedance: 4Ω Speaker drivers: 6.5 inches (160 mm) woofer Frequency response: 60 Hz ~ 150 Hz Dimensions: 5.9 x 12.2 x 12.1 inches (149.5 x 310.5 x 308 mm) Weight: 8.29 lbs. (3.76 kg)		
	Video output RCA jack x 1	1 Vp-p (75Ω)		
	Component video output RCA jack x 3	Y: 1 Vp-p (75Ω)	PB: 700 mVp-p (75Ω)	PR: 700 mVp-p (75Ω)
	Analog audio input (AUX) RCA jack x 2	L/R: 2 Vrms (47kΩ)		
	Digital audio input (Coaxial) RCA jack x 1	500 mVp-p (75Ω)		
	HDMI output HDMI jack x 1	Video: 480p, 720p, 1080i, 1080p, 1080p24 / Audio		
	RADIO FM ANT 75Ω jack x 1	Tuning range: FM 87.5 - 108 MHz (100kHz) Antenna terminal: 75Ω (unbalanced)		

Note

- The specifications and design of this product are subject to change without notice.

Maintenance

Servicing

- Please refer to relevant topics on "Troubleshooting" on page 46 before returning the product.
- If this unit becomes inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Turn the unit to the standby mode, unplug the power plug, and please contact 1-800-605-8610 or visit : www.magnavox.com/support

Cleaning the cabinet

- Wipe the front panel and other exterior surfaces of the unit with a soft cloth.
- Never use a solvent, thinner, benzene or alcohol to clean the unit. Do not spray insecticide liquid near the unit. Such chemicals may discolor the surface or damage the unit.

Cleaning discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

Cleaning the disc lens

- If this unit still does not perform properly although you refer to the relevant sections and to "Troubleshooting" in this manual, the laser optical pickup unit may be dirty. Consult your dealer or an authorized service center for inspection and cleaning of the laser optical pickup unit.

Disc handling

- Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.
- Always store the disc in its protective case when it is not used.
- Note that discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played back on this unit. Do not attempt to playback such discs, as they may damage the unit.

IR signal check

- If the remote control is not working properly, you can use a digital camera (including a cellular phone with built-in camera) to see if it is sending out an infrared signal.

With a digital camera (including built-in cell phone cameras):



Point a digital camera towards the remote control. Push any button on the remote control and look through the digital camera. If the infrared light appears through the camera, the remote control is working.

MAGNAVOX

LIMITED WARRANTY

FUNAI CORP. will repair this product, free of charge in the USA in the event of defect in materials or workmanship as follows:

DURATION:

PARTS: FUNAI CORP. will provide parts to replace defective parts without charge for one (1) year from the date of original retail purchase. Certain parts are excluded from this warranty.

LABOR: FUNAI CORP. will provide the labor without charge for a period of ninety (90) days from the date of original retail purchase.

LIMITS AND EXCLUSIONS:

THIS WARRANTY IS EXTENDED ONLY TO THE ORIGINAL RETAIL PURCHASER. A PURCHASE RECEIPT OR OTHER PROOF OF ORIGINAL RETAIL PURCHASE WILL BE REQUIRED TOGETHER WITH THE PRODUCT TO OBTAIN SERVICE UNDER THIS WARRANTY.

This warranty shall not be extended to any other person or transferee.

This warranty is void and of no effect if any serial numbers on the product are altered, replaced, defaced, missing or if service was attempted by an unauthorized service center. This limited warranty does not apply to any product not purchased and used in the United States.

This warranty only covers failures due to defects in material or workmanship which occur during normal use. It does not cover damage which occurs in shipment, or failures which are caused by repairs, alterations or products not supplied by FUNAI CORP., or damage, which results from accident, misuse, abuse, mishandling, misapplication, alteration, faulty installation, improper maintenance, commercial use such as hotel, rental or office use of this product, or damage which results from fire, flood, lightning or other acts of God.

THIS WARRANTY DOES NOT COVER PACKING MATERIALS, ANY ACCESSORIES (EXCEPT REMOTE CONTROL), ANY COSMETIC PARTS, COMPLETE ASSEMBLY PARTS, DEMO OR FLOOR MODELS.

FUNAI CORP. AND ITS REPRESENTATIVES OR AGENTS SHALL IN NO EVENT BE LIABLE FOR ANY GENERAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR OCCASIONED BY THE USE OF OR THE INABILITY TO USE THIS PRODUCT. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND OF ALL OTHER LIABILITIES ON THE PART OF FUNAI, ALL OTHER WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED BY FUNAI AND ITS REPRESENTATIVES IN THE UNITED STATES.

ALL WARRANTY INSPECTIONS AND REPAIRS MUST BE PERFORMED BY AN AUTHORIZED SERVICE CENTER.

THIS WARRANTY IS ONLY VALID WHEN THE UNIT IS CARRIED-IN TO AN AUTHORIZED SERVICE CENTER.

THE PRODUCT MUST BE ACCOMPANIED BY A COPY OF THE ORIGINAL RETAIL PURCHASE RECEIPT. IF NO PROOF OF PURCHASE IS ATTACHED, THE WARRANTY WILL NOT BE HONORED AND REPAIR COSTS WILL BE CHARGED.

IMPORTANT:

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE. IF, AT ANY TIME DURING THE WARRANTY PERIOD, YOU ARE UNABLE TO OBTAIN SATISFACTION WITH THE REPAIR OF THIS PRODUCT, PLEASE CONTACT FUNAI CORP.

ATTENTION:

FUNAI CORP. RESERVES THE RIGHT TO MODIFY ANY DESIGN OF THIS PRODUCT WITHOUT PRIOR NOTICE.

WARRANTY STATEMENT REGARDING NON AUTHORIZED REPAIRS:

To obtain warranty service, you must take the product, or deliver the product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to any AUTHORIZED SERVICE CENTER. FUNAI CORP. will not reimburse you for any service done by unauthorized service providers without prior written approval.

To locate your nearest AUTHORIZED SERVICE CENTER or for general service inquiries, please contact us at:

FUNAI SERVICE CORPORATION

Tel: 1-800-605-8610

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